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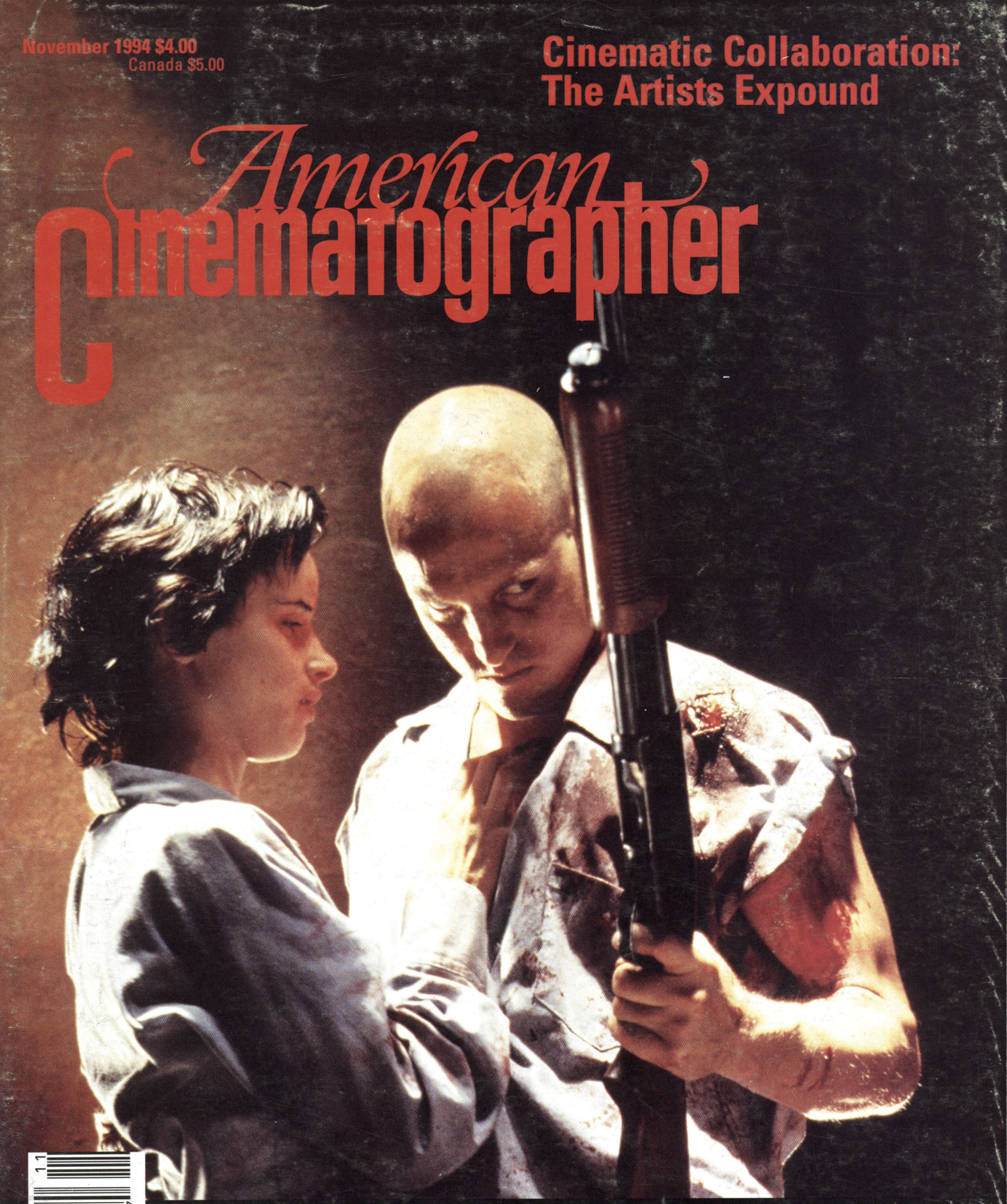

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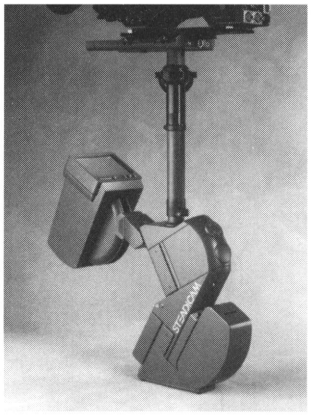

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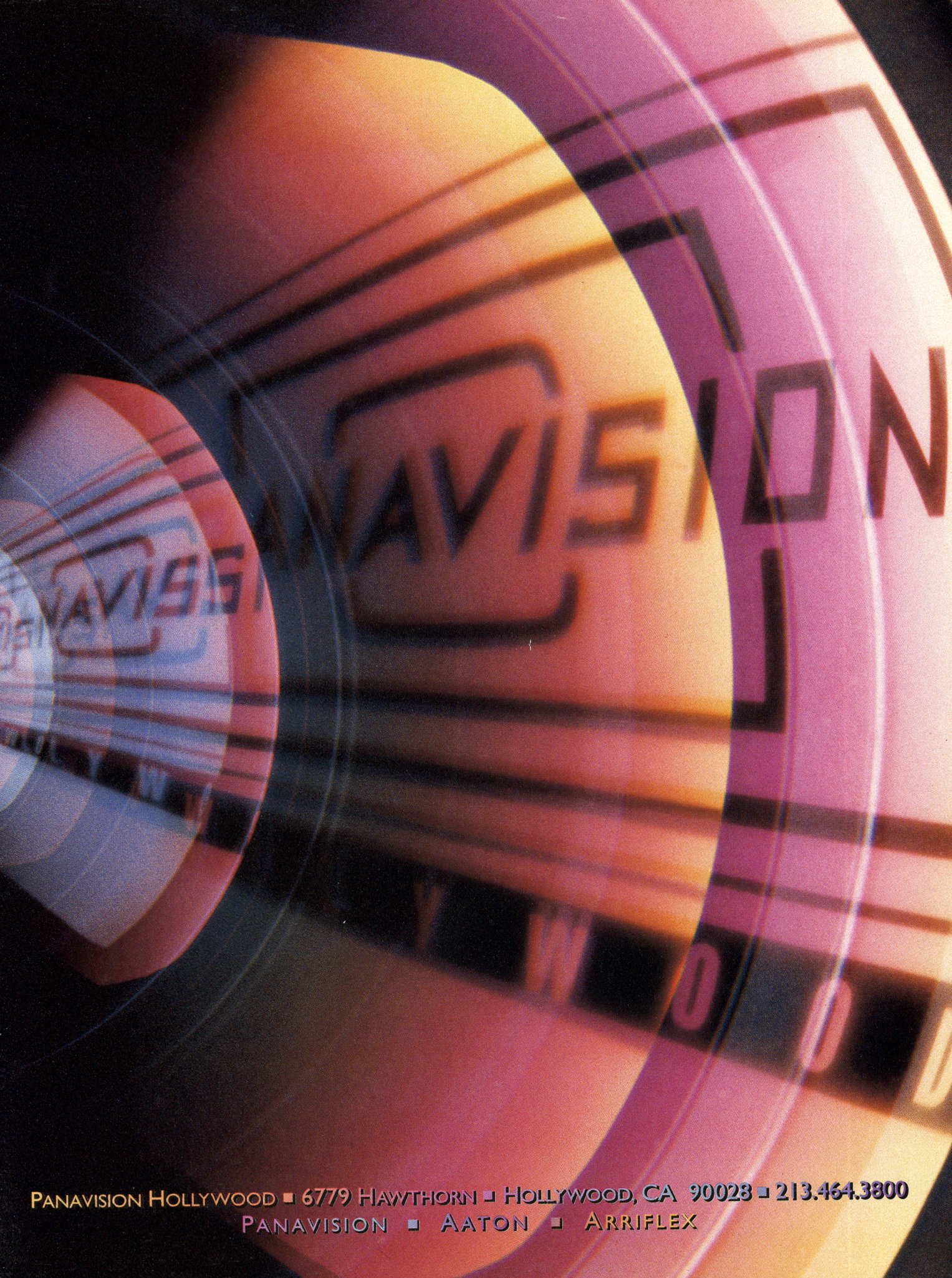

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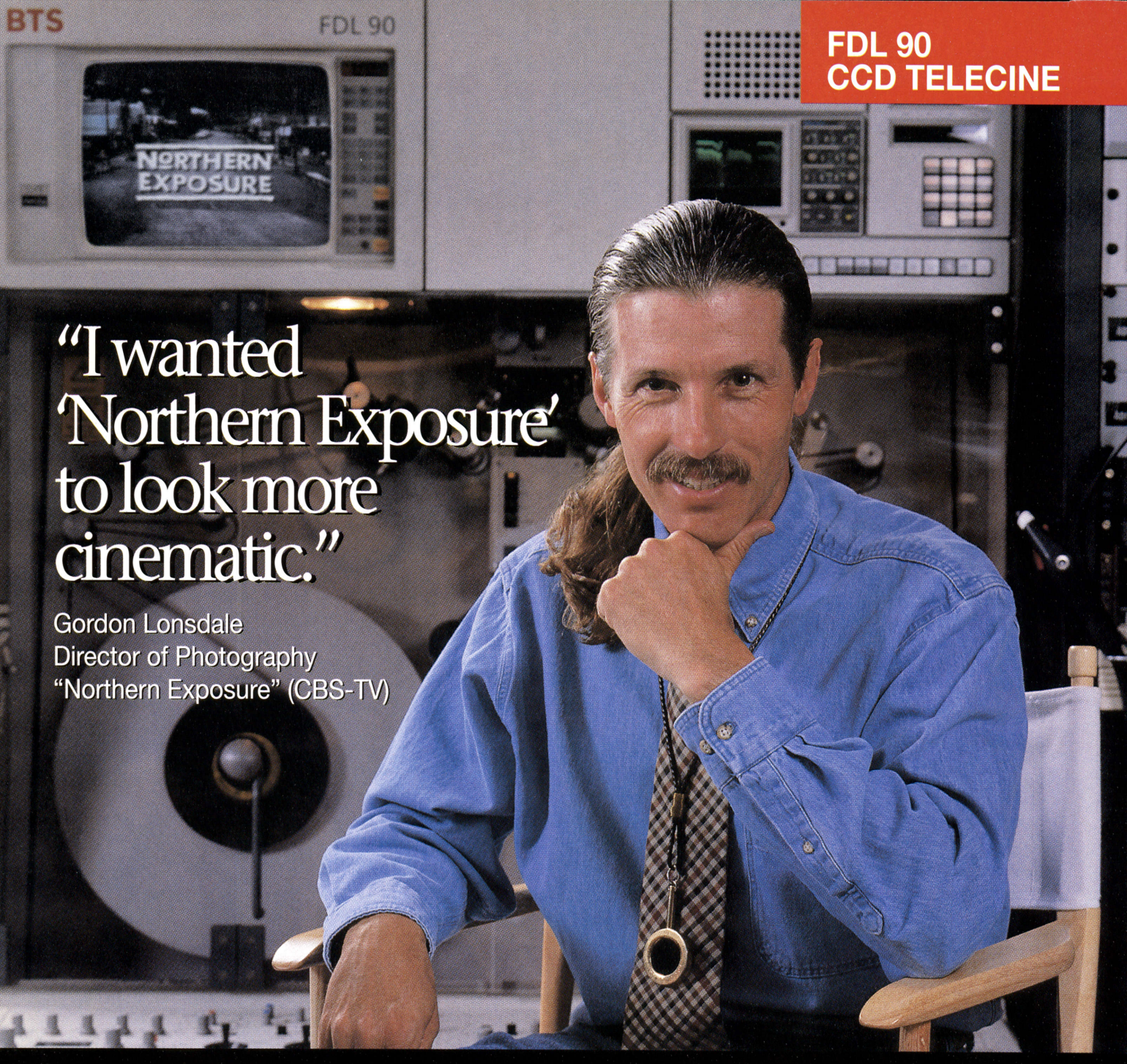

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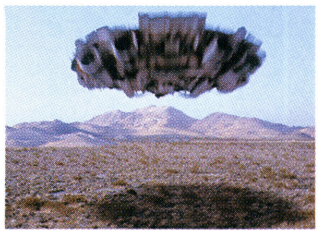

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On Our Cover: Bathed in the hard toplight favored by cinematographer Robert Richardson, ASC, serial killers Mickey and Mallory Knox (Woody Harrelson and Juliette Lewis) get ready for some gunplay in *Natural Born Killers* (photo by Sidney Baldwin).

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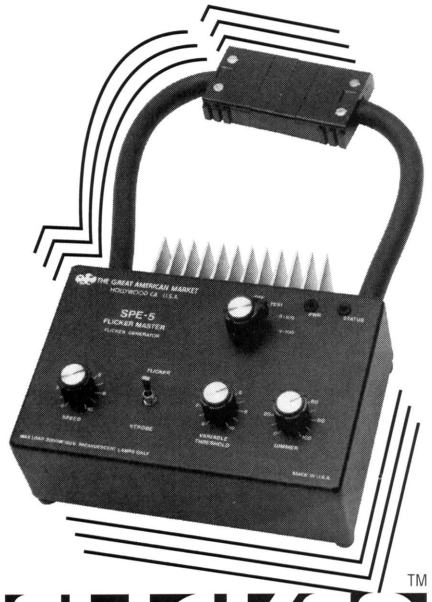

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Letters

True Praise

Regarding the excellent article in *AC's* September '94 issue on *True Lies*, Mr. Cameron's striving for perfection should be commended, not condemned. Perfection should be a necessary ingredient in all directors.

Mr. Cameron, cinematographer Russell Carpenter and the rest of the *True Lies* crew produced an aesthetically perfect film. What sets Mr. Cameron's films apart from others are the interesting storylines he comes up with to accompany the visual treats. Although this does not always guarantee a successful mix in box-office terms, Mr. Cameron's name stands for quality in work.

This is not said enough in regards to Mr. Cameron's overall work. As a film student, it would be an honor to work on a Cameron film, where perfection is just part of the requirement.

Keep up the great work in your technically interesting articles on the films you cover.

— Doug Trantham
Tucson, AZ

More True Fans

I traveled to Dallas to see *True Lies* in 70mm because I read that Cameron shot it in Super 35, and I wanted to see what the blowup looked like. I was surprised how great it looked. It's the first film I've seen in 70mm that was blown up from Super 35, and it even looked better than *Far and Away*, which was filmed in 70mm.

My only technical complaint about *True Lies* is this: with all the money that goes into these films, when will filmmakers find a way to make rear projection look real? Maybe it's just Hollywood's equivalent of the common cold.

— Shawn Watson
Arlington, TX

Kino Correction

Just a quick note to compliment Steve Pizzello on his masterful wordsmithery in the *True Lies* piece (*AC* September). I also wanted to let your readers know that Robert Neville, Russell Carpenter and James Cameron could have saved a bundle in blown-up ballast repairs if they had asked for Kino Flo's specially designed ballasts that operate on a flicker generator without going kaplooey.

Most of Kino Flo's high-output, electronic ballasts latch up to protect themselves when abused, such as being disconnected from the lamps while still running. However, when the need arises, Kino Flo can supply a show with the models that love being flickered. So if you're a gaffer or director of photography, just ask.

— Frieder Hochheim
President, Kino Flo, Inc.

Wrong Flight, Wrong Camera

The images on the Last Page of the August 1994 issue you refer to as being shot on 65mm film were not. The images of the Long Duration Exposure Facility being deployed from the cargo bay of the space shuttle Challenger were shot with a modified Arri III (standard 35mm configuration) in a container in the cargo bay of the orbiter during mission STS-41C. Bruce McCandless and Ronald McNair were not on that flight, but rather on STS-41B. The film they shot on that flight was 35mm, again with an Arri III.

There was a 65mm Imax camera aboard STS-41C, but it did not shoot these images.

— James Neihouse
Imax Space Technology
Houston, TX

Historical Lauded

Thank you so much for the two-part article about Pavel Klushantsev by Lynn Barker and Bob Skotak. I am amazed that there has not been more written about this pioneer. The production stills were incredible and I have begun searching for copies of the films mentioned. I only wish there was a way to help Pavel get out of Russia and receive the credit he deserves.

We congratulate DONALD W. MORGAN ASC on winning both a Cinematography EMMY and an ASC Award for his work on *Geronimo*.

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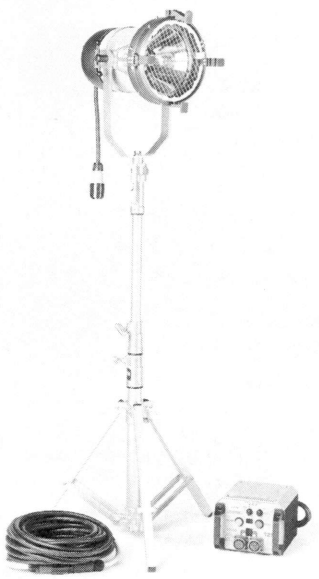

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Anyone familiar with Bob Skotak and his brother Denny's effects work on such films as *Aliens*, *The Abyss*, *Terminator 2: Judgment Day*, and *Batman Returns* can see what a powerful influence Klushantsev has been on them. In this age of CGI and digital compositing, the Skotaks have continued to create stunning effects with models, beam splitters, and matte paintings. It seems like the spirit of Pavel Klushantsev lives on in their work.

— Patrick J. Donoghue
Viacom Interactive TV
New York, NY

Tape to Film

You may wish to share with your readers that a new motion picture — *How to Meet Strangers in a Movie Theater*, which premiered in Boston in June — was shot on a consumer level S-VHS camera and transferred to 35mm.

The consumer-level S-VHS transfer to 35mm film footage was performed at 4MC, formerly Image Transform, of Los Angeles. The footage looked fabulous (high resolution) and no one guessed it was generated on video, nor did they comment adversely on the image quality.

I submitted to 4MC original and second generation S-VHS footage shot on a consumer S-VHS camera that went out of production in 1988, the Panasonic Omnimovie PV-S440. The sound was recorded on a Sony EMC-50 mike but I neglected to use an impedance matching transformer. Nevertheless, the sound was fine. It was edited on industrial S-VHS equipment. 4MC bumped my video to Beta before transferring it.

I was surprised at the quality of the S-VHS-35mm transfer that I was able to achieve and I would be happy to share with any of your readers (they may feel free to call me) my firsthand experience with the video-to-film technology.

Because of the quality of the transfer, I want to do a feature film using this company's technology. I may shoot it on Hi-8, rather than S-VHS if I can achieve similar test results in the Hi8 format. I will soon be conducting such a test.

This is the type of news that brings hope to low-budget filmmakers who want to reduce their front-end production costs and then have an edited video to show an investor who can then decide if it's wise to pay for a transfer to 35mm for theatrical release.

— Marc Halberstadt, Producer
Cambridge, MA
(617) 491-2085

Overseas Appeal

Last January, I discovered the *AC* magazine for the first time through a specialized film library in Paris. For years, I've been looking for such a great magazine about cinematography and finally I found it! You can't imagine how delighted I was the first time I read through the *AC* magazine.

For a young film director/cinematographer like myself, trying to succeed, the *AC* magazine is an incredible mass of knowledge and invaluable expertise. I must admit I'm always reading over 90% of the magazine, something I've never done before.

In a year of reading, the *AC* magazine has substantially proved what I knew right from the beginning: you Americans are the best filmmakers in the world, putting on film (and video) images that are light-years ahead of those seen here in Europe.

I love this kind of cinematography and I am definitely lighting my commercials and films this way. I know that it disturbs a lot of important people who are "fighting" for the cultural identity, but I see at each screening of my films that most of my clients like these kinds of beautiful entertaining images.

— Lucio Cordone
Director/cinematographer
Belvaux, Luxembourg

Thank you for the kind words. As the filmmaking industry continues to become more global, it's encouraging to know we're hitting the mark. One note of caution: good cinematography (and for that matter, bad cinematography) is found everywhere motion pictures are made. No true art form is a competition. In the United States, cinematography has the advantages of a wealthy industry, a terrific network of support companies, and the ASC's 75-year-old tradition of nurturing the art and its community of practitioners. Continuing that tradition is one of our raisons d'etre, regardless of national borders.

— *Editor*

We congratulate ROLAND (OZZIE) SMITH on winning both a Cinematography EMMY and an ASC Award for his work on *Dr. Quinn, Medicine Woman.*

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This two-sheet poster of the great ape in action was prepared for the French release of the 1933 classic.

Rare Film Posters Auction

Poster Auctions International will be auctioning a collection of 1,000 rare film posters in New York City on November 13. Foremost in the collection is the poster for the 1925 Soviet film *Battleship Potemkin*, made to commemorate the 20th anniversary of the 1905 uprising. Another poster, promoting the 1924 Soviet film *Aelita*, Russia's first science-fiction film, is the only known poster in existence for that film. Also in the collection are posters for the French release of 1933's *King Kong*, the 1924 French film *The Inhuman, The Blue Angel*, the Italian release of *Citizen Kane*, the Swedish version of Garbo's *Flesh and the Devil, Black Orpheus*, the French release of *On the Waterfront*, and the German release of Cecil B. DeMille's 1919 *For Better or Worse*.

Special collections will include more than 400 East German posters from 1970 to 1990, 36 posters for West German films from the 1960s, and a group of 215 posters from Czechoslovakia, advertising Eastern films and American films ranging from the silent era to the latest "Americky film Clintem Eastwoodem."

Pre-sale viewing of the posters is free and open to the public from 9:00 a.m. to 9:00 p.m. on Friday and Saturday, November 11 and 12.

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Topics covered in system administration and site administration classes range from basic system administration to performance tuning and mixed-environment administration.

For information: Great Eastern Technology, Inc., (800) 875-0025.

Location Search Network

The Eastman Kodak Exchange Location Search Network provides film and commercial production companies with quick access to thousands of still images and pertinent information about those locations. The Directors Guild of America will be participating in the test project, as will ten film commissions, including Arkansas, Australia, Butte County (California), Colorado, Massachusetts, Rochester/Finger Lakes, Tennessee, Utah, Winston-Salem and Wisconsin.

The images and relevant information about the locations are converted to Photo CD file format and are maintained in a data center in Rochester, New York. Locations can be viewed online, in panoramic format, in various sizes and from multiple perspectives. Images can be downloaded and stored on hard drives or optionally written to Kodak writable CD for convenient viewing on computer or TV. Hard copies of images can also be output as photo-realistic thermal prints.

A window can then be used to access such information as names of contacts, production history and any required permits or fees. An online communication bulletin board also allows information to be exchanged directly between the film commission contact and the location scout.

The Location Search Network is one of two major Photo CD initiatives that Kodak launched in Hollywood last September. The company is also participating in pilot image management projects at five major studios including Disney, Twentieth Century-Fox, Paramount Pictures, Sony Pictures, MCA and Warner Bros. Kodak loaned each of the studios Photo CD systems projects,

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which are designed to make still image film management more effective and efficient.

Part of Fox' pilot project involves scanning about 10,000 images of locations in and around the Los Angeles area. Producers and directors would be able to enter key words and come up with a list of potential sites. Fox also scanned about 1,500 images of set props onto Photo CD disks to determine the viability of using this imaging technology as an information management tool.

Eastman Kodak and the California Film Commission will work together to develop location image management standards for the entertainment industry. Both organizations are developing entertainment production location resource systems for the purpose of providing online access to production location information. The California Film Commission Library Automation Project (LAP), a national model for public/private joint ventures comprised of entertainment, technology, government and academic sectors, focuses on the creation of an automated production resource database and electronic film permitting system for California. The CFC LAP is a five-phase project merging textual, graphical and spatial data. The preliminary phases are focused on linking data input by local production information producers (cities, counties and vendors) with data output by entertainment information consumers (producers and location managers). The CFC plans to have the first phase up and running by the end of this year.

For information: Eastman Kodak Co., (213) 464-6131.

R/GA Online

R/GA Digital Studios is now online with Drums, a new collaborative production network from Sprint and Silicon Graphics for SGI's Silicon Studio partners. The network is a private real-time data superhighway for collaborative works in progress between team members at different sites, allowing for quick feedback and communication on time-sensitive projects. The network provides a video conferencing tie between the company's Los Angeles and New York locations, as well as with creatives in the advertising, entertainment and corporate communities at other distant locations.

The network allows R/GA to digitally transmit animation, digital video, high-resolution images, pre-press materials and interactive multimedia between its New York and Hollywood studios, as well as to other partner locations, via a T-1 connection. The network is also a gateway to the Internet.

In order to facilitate the multi-site creative process, Silicon Graphic Indys and full-color monitors in R/GA's New York and L.A. conference rooms now are dedicated to video conferencing between the two studios and other sites on the network. Real-time live video images of the conference participants, at up to four separate locations, allow for an intimate and effective exchange of ideas. A mouse-operated "drawing board" also enables color sketches and images to be transmitted between sites in real time.

The 1.5 Mbps data rate, which is about 1/100 that of D-1 digital video, allows an uncompressed 30-second spot to be digitally transmitted from coast to coast in about an hour. Sophisticated image-compression techniques will reduce that time to a minute or two for broadcast-quality imagery, or 30 seconds real time for video conferencing-quality imagery.

For information: R/GA Digital Studios, 350 West 39th St., New York, NY 10018, (212) 239-6767, or 6526 Sunset Blvd., Los Angeles, CA 90028, (213) 957-6868.

New Media Lab

The New York University Tisch School of the Arts is planning to establish a media laboratory in its Interactive Telecommunications Program (ITP) with the help of a $500,000 gift from Time Warner Inc. The ITP lab is the first step toward an enlarged media complex that allows interdisciplinary explorations in the new media.

Initially, the new Media Lab will house digital video and three-dimensional graphics tools and workstations which will enhance their current experimental capabilities.

A portion of the Time Warner gift, according to Tisch School Dean Mary Schmidt Campbell, will be allocated to help encourage interdepartmental work in film, video, animation and photography as well as in interactive telecommunications.

For information: New York University, 25 West Fourth St., New York, NY 10012-1199.

SGI Developers' Studio

Silicon Graphics, Inc. has announced the creation of Silicon Studio, Inc., a new company focused on enabling applications development for emerging interactive digital media markets. The new wholly-owned subsidiary will work with third-party software developers, content creators and distributors to extend Silicon Graphics' already established role in media authoring markets, including film and video, publishing, and such expanding areas as interactive television, next-generation video games, and location-based entertainment.

Silicon Studio will be based in Mountain View, California.

For information: Silicon Graphics, 2011 N. Shoreline Blvd., Mountain View, CA 94043-1389.

Film Scanning Center

Cineric, Inc. is now offering film scanning services, having purchased an Oxberry High Resolution Film Scanner. Their primary function will be the archiving and digital restoration of motion picture film. They will also provide film scanning services for postproduction houses. Users will be able to transfer to film, HDTV or 525/625.

Cineric is a film facility dedicated to the preservation and restoration of motion picture film. Through the use of proprietary computer and liquid immersion techniques they have been responsible for the restoration of many feature projects, including *A Man for All Seasons*, *Jason and the Argonauts*, and *American Graffiti*.

For information: Cineric, Inc., 321 West 44th St., New York, NY 10036, (212) 586-4822, FAX (212) 582-3744.

Movie Forum

The National Videotex Network is a nationwide online information and communications service network which gives computer users access to a wide spectrum of interactive, informative and entertaining services. The network's Movies Forum provides a common meeting ground where members can exchange information and ideas on cinema and the film industry, attend live electronic conferences with celebrities and technical support professionals, partici-

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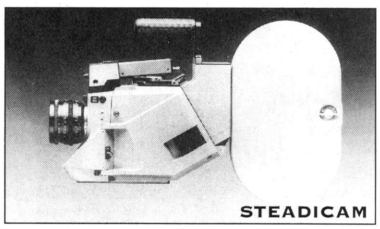

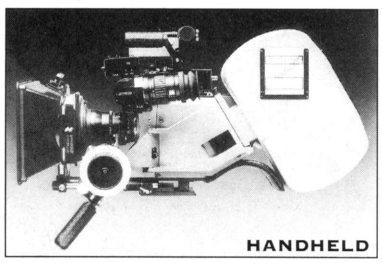

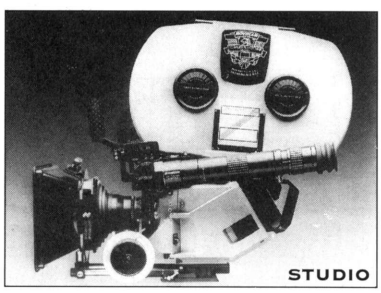

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pate in live group discussions and upload/download a variety of data files, which can include promotional press releases and photographs.

Text information provided on an IBM-compatible 3 ½" floppy disk (plain ASCII format) will almost always get posted. Press releases that arrive in printed form often require re-typing into their computer system, so those items may or may not be used, based on the administrators' work load, lead times, etc.

For information: Movie Forum Services, 1605 Princess St., Wilmington, NC 28401, (910) 763-6055, FAX (910) 762-4756, Modem (910) 763-1850.

Wildfire in Europe

Los Angeles-based Wildfire now has a European distribution arm based in the United Kingdom. The new company will distribute the full line of Wildfire effects, UV lighting fixtures and materials and will attend all of the major European lighting trade shows.

For information: Wildfire, Inc., 11250 Playa Court, Culver City, CA 90230-6150, (310) 398-3831, FAX (310) 398-1871.

MIRA Merger

MIRA Film & Video and The Edit Suite have become a single company, MIRA Creative Group, focusing in the areas of advertising, direct-response TV, business-to-business communications, and specialty programming.

For information: MIRA, 116 N. Page St., Portland, OR 97227, (503) 464-0630, FAX (503) 464-0782.

FX Co. Expands Digitally

Special effects production company Available Light has established a new computerized digital special effects division, and has hired digital production supervisor Bill Arance, key digital animator January Nordman, and digital systems supervisor Bob Lyss to head the new division.

For information: The Lippin Group, (213) 965-1990.

PBS Cinema Series

American Cinema, a co-production of the New York Center for Visual History, KCET/Los Angeles, and the BBC, is a ten-hour television program celebrating American filmmaking as an industry, an art form, and a barometer of American culture. The show will begin airing on Monday, January 23. Each one-hour program focuses on a single aspect of the movies in America, including the idea of the movie "star" and the rise of the studio system, the genres of film noir and screwball comedy, and a look at the new breed of independent filmmakers.

The series interviews directors, producers, industry executives, stars, screenwriters, editors and cinematographers, including Robert Altman, James Brooks, Brian De Palma, Clint Eastwood, Michael Eisner, Douglas Fairbanks, Jr., Harrison Ford, Charlton Heston, Jack Lemmon, George Lucas, Garry Marshall, Sydney Pollack, Julia Roberts, Gena Rowlands, Jane Russell, Martin Scorsese, Steven Spielberg, Oliver Stone, etc.

The interviews are complemented with clips from more than 200 feature films; film footage and photographs that capture the life of Hollywood, past and present; segments that go behind-the-scenes to see how movies were and are made; and commentary from film critics and scholars.

Each episode is narrated by a major actor or actress, including Kathleen Turner ("The Star"), Eli Wallach ("The Western"), Matthew Modine ("The Combat Film"), Richard Widmark ("Film Noir"), and Cliff Robertson ("Film in the Television Age.")

For information on purchasing videocassettes of the programs: (800) LEARNER.

Desktop Video Merger

Desktop video companies Digital Creations, Progressive Image Technology, and a group of eight former employees of NewTek have joined together to form Play, Inc., based in Sacramento, CA.

For information: Play, Inc., 160 Blue Ravine Road, Suite B, Folsom, CA 95630-4718, (916) 344-4825, FAX (916) 635-0475.

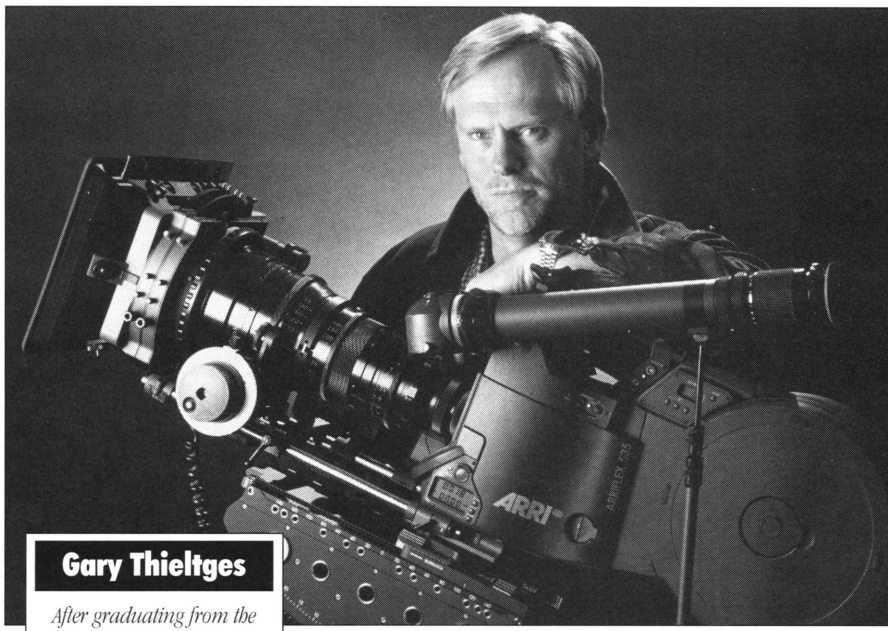
Atlanta Post House Opens

Dennis Hayes & Associates, an editing and postproduction company, has opened an office in Atlanta. The office will be digitally connected to the New York and Los Angeles offices.

For information: Dennis Hayes & Associates, 512 Means St., #340, At-

"After shooting several spots in the U.S. for the European market using noisy, expensive and unreliable square wave HMI's, I decided to find a better way to deal with the 25fps/60 cycle problem."

–Gary Thieltges



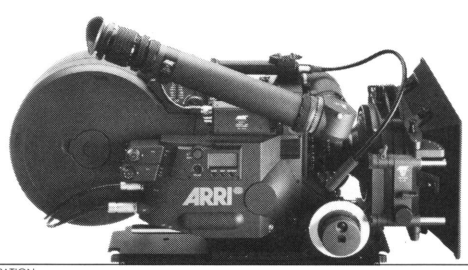
Gary Thieltges

After graduating from the AFI cinematography program in 1978, Gary was awarded the Alfred Hitchcock Fellowship in Cinematography in 1979. He began working with John Alcott in 1980 as a focus puller, going on to photograph seven features including Eating Raoul. *Since 1986, Thieltges has photographed more than 1000 commercials.*

"Now, with my ARRI 535, I can shoot 25fps with standard HMI's and 60 cycle current. The ability to set a precise 150° shutter makes shooting for foreign clients easy and reliable at no extra cost to production. Believe me, producers like that!"

The business of commercial production can get complicated when you're shooting for foreign markets. Different countries, different standards, different frame rates. How can you originate footage in Los Angeles and insure that it will play in London without going over budget? The electronically variable mirror shutter on the ARRI 535 provides a simple, elegant solution. Program the camera to effortlessly lock in a shutter angle of precisely 150°. Combine this with 25fps, the standard frame rate for Europe, and shoot away. It's as simple as that.

The world's only electronically variable shutter is just one of the many revolutionary features on the ARRI 535 designed to expand your creative options. And, as Gary Thieltges has discovered, options like these are a welcome addition on any set.



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BBC Footage Library Office Opens

BBC Library Sales has opened a Burbank office from which it will license the vast television archives of the British Broadcasting Corporation, which hold more than 400 million feet of film and 200,000 hours of videotape. The archive encompasses all genres: news and current affairs, contemporary history, music, art, popular culture, and the world's most comprehensive wildlife/nature film library.

For information: BBC Library Sales, 3500 West Olive Ave., Suite 110, Burbank, CA 91505, (818) 840-9770, FAX (818) 840-9779.

Computer Consulting Shop

Former Editel/NY Graphics producer Martin Focazio has opened a new computer consulting shop specifically for the production industry. The company was founded to provide consulting to advertising agencies, postproduction companies, design studios and production companies wanting to connect to the Internet or other online services. The company specializes in the practical application of online services to facilitate business communication in the production industry exclusively.

Working with Internet applications such as Mosaic, Fetch and Gopher, the company is developing inter-company interfaces for presentation and distribution of current demo reels, promotion materials and electronic mail.

For information: (212) 722-7131, FAX (212) 423-0656, e-mail martyf@panix.com.

Archivist Honored

Film archivist John E. Allen has been named the 1994 winner of the International Documentary Association's Preservation and Scholarship Award. Allen, whose library of more than 30 million feet of film dates back to 1896, is being honored for his efforts to preserve those films. He was singled out for his work in restoring shrunken, damaged and deteriorating films, including unstable flammable nitrate-based films, which predate today's safety film stock.

Allen's company, John E. Allen, Inc., was founded in 1976 by his father, John E. Allen, who died in the 1930s. The stock footage library includes a large collection of newsreels, including very early Kinograms and the later Telenews. The library is one of the most extensive private collections of early films in the United States. An outgrowth of the stock footage library has been the establishment of a lab in Pennsylvania that handles everything except processing of original camera negative.

For information: IDA, 1551 S. Robertson Blvd., Suite 201, Los Angeles, CA 90035-4233, (310) 284-8422.

Avid Acquisition

Avid has acquired the news division of BASYS Automation Systems, a maker of newsroom automation systems, and SofTECH Systems, a developer of Windows-based newsroom automation software.

Avid will also be developing with Ikegami Tsushinki Co. a disk-based video camera for field capture of news material. Avid also announced networking and video server technology that integrates its disk-based recording, editing and playback products.

BASYS, owned by Digital Equipment Corp., has as customers some of the world's largest broadcasters — among them CNN, NBC, BBC, and ITN. SofTECH's flagship product operates on Windows-based PCs connected via Novell networks, and is used on stations within Gannett Broadcasting, Allbritton Communications, and AFLAC Broadcasting.

For information: Avid Technology, Inc., Metropolitan Technology Park, One Park West, Tewksbury, MA 01876, (508) 640-6789, FAX (508) 640-1366.

New Imax Series

Destiny in Space, the third in a space-film trilogy (*The Dream is Alive*, *Blue Planet*), premieres at the California Museum of Science and Industry Imax Theater on November 13. The 40-minute film examines current human and robotic space exploration efforts and features footage taken by astronauts during nine shuttle flights. The film traces the launch, servicing and re-deployment of the Hubble Space Telescope, and includes the first-ever Imax footage of the space shuttle in flight around the Earth, shots of an evening shuttle launch 100 feet from the launch pad, as well as footage of astronauts at work.

Studio 65 and Studio 80 II.

The best fluid heads for 35/65 mm film. From Sachtler.

Sachtler's Studio 65 and Studio 80 II fluid heads offer everything for top quality pictures for 35 mm and 65 mm film cameras.

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based on Sachtler's proven design principles guarantees smooth movements under any conditions for any focal length.

2 The strongest counter balance:
up to 80 kg (180 lbs.) for Studio 80 II for heavy 35 and 65 mm cameras, up to 50 kg (110 lbs.) for Studio 65 for standard 35 mm cameras.

3 The widest sliding range:
100 mm (40") for the Studio 65, 130 mm (52") for the Studio 80 II adjustable through spindle tuning. No matter if wide angle with large film magazine or tele with a 200 ft magazine on the camera – the centre of gravity can always be adjusted for optimum camera handling in either pan or tilt position.

4 The adjustable rigid **pan arm** transmits all movements precisely and can be attached on either side of the fluid head.

The new **Studio 65** introduces the ideal combination of maximum damping and low weight. It has the damping of the **Studio 80 II** in the smaller housing of the popular **Studio II (7+7)** head.

5 And – using the Sachtler **Dutch Head** Attachment offers you even greater versatility in the field with both heads.

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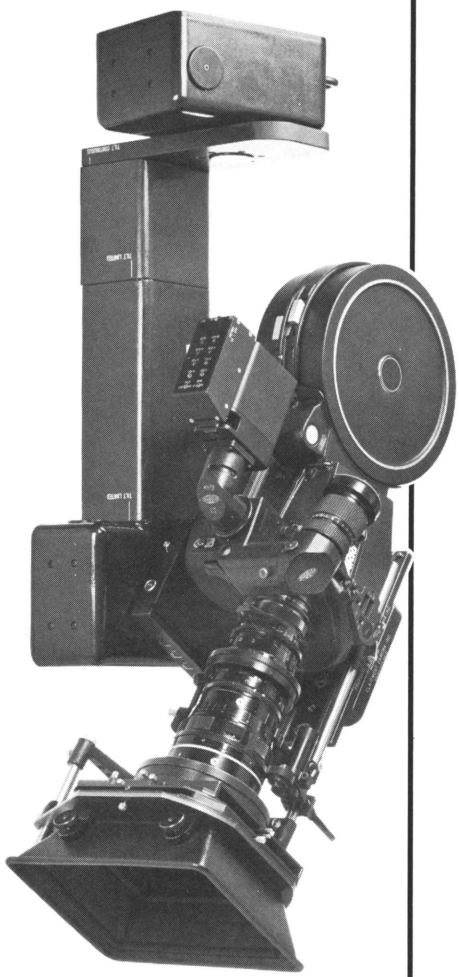

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Using computer-generated sequences based on actual satellite footage, the audience is also taken to the piping hot surface of Venus and the vast canyons of Mars.

For information: California Museum of Science and Industry, (213) 744-2014.

Digital Editing Training

Ediflex is now offering training on their Ediflex Digital Systems. For information: Ediflex, (818) 502-9100.

S.O.C. Honors

Steven Speilberg and astronaut Buzz Aldrin were honored October 29 at the Society of Operating Cameramen Lifetime Achievement Awards banquet. Spielberg was given the Governors Award for his contributions to cinema, and Aldrin was recognized for his work in advancing photography in space. Also honored were camera operator Bill Johnson, video camera operator George Meyer, camera assistant Kenneth Hale, and still photographer Phil Stern. Howard Block received the President's Award for dedicated service to the S.O.C. and O'Connor Engineering Laboratories, J.L. Fisher, Inc. and John M. Stephens received a Technical Achievement Award for their innovative contributions to the art and craft of the camera operator.

Domino Center Opens

Quantel has opened its first Domino Demo & Training Center in Beverly Hills, offering screening, demos and training on the company's Domino digital image manipulation system. The office will be Quantel's headquarters for Domino sales, servicing, product demonstration and training in the United States.

For information: (201) 656-3100.

FX System Busy

Tell-A-Vision Post's Composium graphics system has been used recently to create special digital effects and main title sequences for *Quiz Show*, *Exosquad*, and *Demolition Man*. The Composium is a turn-key special effects system that combines digital paint, animation, layering compositing and editing in real time.

A Tell-A-Vision Post graphic artist/compositor worked with RGA/LA to test-render main- and end-title sequences for Robert Redford's *Quiz Show*. Employing the Composium D-1 Suite, Tell-A-Vision's artist was able to render the graphic design of the movie's open, end credits, and set timings and establish the overall look for client approval; the results were later conformed on the final cut of the film.

For *Demolition Man*, Michael McAlister and Chris Watts of Warner Bros. came to Tell-A-Vision to test the feasibility of creating a snow environment and altering scenes after principal photography. The Composium transformed existing scenes into a sub-zero environment, rotoscoped to live action and made inanimate objects freeze at precise points.

For information: (310) 659-0380.

Upcoming Events

October 30-November 5: Introduction to Computer Animation, Maine Photographic Workshops, Rockport, ME. For information: (207) 236-8581.

October 30-November 5: Basic Cinematography Workshop, Maine Photographic Workshops, Rockport, ME. For information: (207) 236-8581.

Various Weekends in November, and December: 2-Day Film School, Denver (November 5-6); Chicago (November 12-13); Toronto (November 26-27); Hawaii (December 10-11). Day one covers film production, day two film business. For information: Hollywood Film Institute, (800) 366-3456, FAX (213) 933-1464.

November 2-3: Rocky Mountain Film and Video Expo, Denver, CO. For information: Mark Cramer, ExpoMasters, Inc., (303) 771-2000.

November 2-6: 10th Annual Film Arts Festival, San Francisco and other Bay Area locations. For information: (415) 552-8760.

November 4-6: 19th Annual Banff Festival of Mountain Films, Banff, Alberta, Canada. For information: (403) 762-6125, FAX (403) 762-6277.

November 5: Symposium on the integration of electronic design into film and TV production, Glendale, CA. For information: (800) 746-3456.

November 6-12: 3-D Anima-

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Ron Howard - Director of *Splash*

★*"We looked all over the United States and could not find anything quite like this...Now we are shooting here and it is perfect."*
Ed Saxon - Producer of *Silence of the Lambs*

★*"We worked with The Bahamas Film Bureau and their extra effort really made our shoot successful."*
Debra Flowers - Producer of Julio Iglesias' Music Video

★*"The location itself also plays a major role...vistas of crystal-blue water and stark white beaches...this latest U.S. remake of a French film offers some of the same breezy charm as its environs."*
***Variety* on "My Father, The Hero"**

Some things never change. The Bahamas have offered spectacular locations for years. And now, just 30 minutes from Florida, you'll find your one-stop, full-service agency whose sole purpose is to assist productions in The Bahamas. Our islands offer a remarkable variety of locations including hundreds of islands, cays, cliffs, caves, unique architecture and some of the world's most spectacular underwater scenes.

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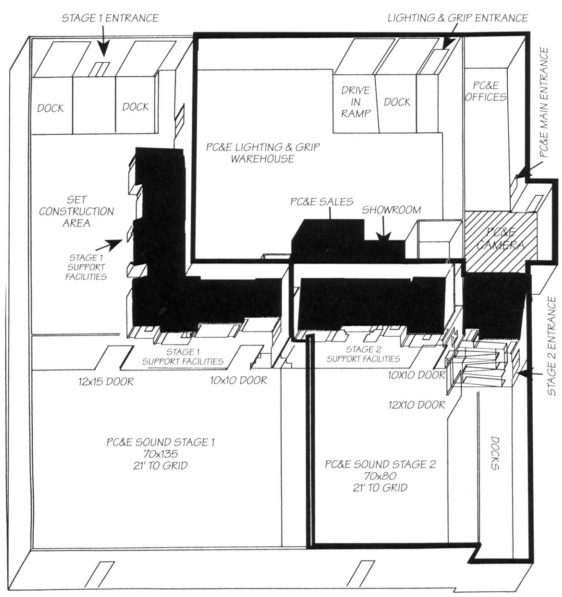

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tion on the Video Toaster, Maine Photographic Workshops, Rockport, ME. For information: (207) 236-8581.

November 6-12: 16mm Film Camera Workshop, Maine Photographic Workshops, Rockport, ME. For information: (207) 236-8581.

November 7-December 12: The Documentary Workshop, six seminars on creating and completing a documentary, the International Documentary Association and Eastman Kodak Company, Los Angeles. For information: (310) 284-8422.

November 8-13: 25th Sinking Creek Film/Video Festival, Nashville. For information: (615) 322-4234 or 322-2471.

November 9-13: 27th Annual WorldFest-Charleston, Charleston, SC. For information: (800) 501-0111.

November 9-13: Sixth Annual Sarasota French Film Festival, Sarasota, FL. For information: (813) 351-9010.

November 10-13: Various workshops at the Audio Engineering Society Convention, San Francisco, including Alternative Digital Media Formats, Video for Audio, 3-D Stereo Sound. For information: (212) 661-8528, (800) 541-7299.

November 11-13: The Early Films of Eric Rohmer, film series at the American Cinematheque at the Directors Guild Theater, Hollywood. For information: (213) 466-FILM.

November 18-20: LDI 94, Trade show for technology and design professionals, Reno, NV. For information: (212) 229-2965, FAX (212) 229-2084.

November 18-20: Lighting Design and Production Techniques workshop in television lighting at LDI 94, Reno, NV. For information: (212) 229-2965, FAX (212) 229-2084.

November 19: The History of the Short Cartoon, animation class at the American Film Institute, Los Angeles. For information: (213) 856-7690.

November 26-December 3: Camerimage International Film Festival of the Art of Photography, Bydgozoz, Poland. For information: Fundacja TUMULT, Rynek Nowomiejeski 28, 87-100 Torun, Poland, phone 48 56 248 79, FAX 48 56 275 95.

December 9-11: Robert Bordiga's Nuts & Bolts Production Seminar, Kissimmee, FL. For information: (800) 755-PROD.

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• The counterweight bucket is supported almost at its center of gravity and, therefore, the tension in the parallel bars is very low. This gives you an equal wheel load which, in turn, means ultra safety and stability

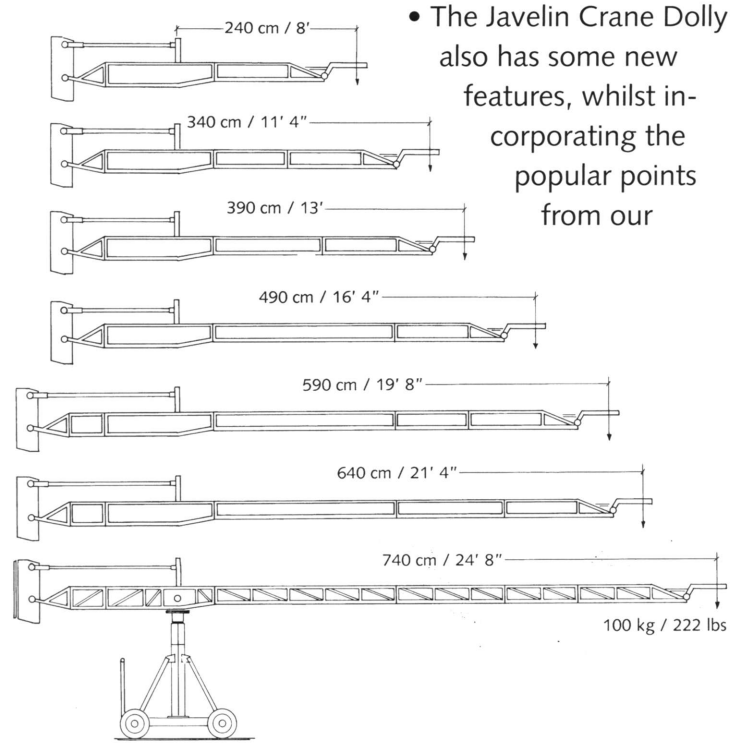
• The crane arm is supplied with handbars for the front and back end, and with pan and tilt markers.

• The very front hand grip actually assists making the " L " bracket level.

• The Javelin Crane Dolly also has some new features, whilst incorporating the popular points from our existing Crane Dolly's. The complete steering mechanism is now under the dolly base grid, saving possible damage during use. The steering method is four wheel steer, which helps the operator maneuver into an awkward space.

• The Column is supplied with a Column Riser, should you require that extra height. Fixing and stabilising of the column is as simple but safe as all Egripment Crane Systems.

With all these improvements, features and additional extras, the new Javelin Crane System is a solid support you can count on.



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CGI on a Shoestring Budget, Part III

More examples of digital magic that won't break the bank.

by Les Paul Robley

*In Parts I and II of this three-part series on affordable digital techniques (*AC *July and Sept.), we focused on the general methods employed by the CGI company Full Moon Entertainment and its digital arm, VFX, as well as the company's work on the upcoming feature* Dragonworld. *In this final installment, we examine the company's work on other low-budget films.*

Full Moon's feature film *Shrunken Heads* overflowed with digital compositing, including live motion-controlled people who had their bodies draped in blue, and miniature heads stuck on programmable blue pylons. Because there were as many as three shrunken heads floating around in a shot at one time, the compositing and rendering required three times the trouble to accomplish. Each element had to be composited separately in the scenes.

One of the most difficult shots in the film involved a model of the shrunken head known as Freddy when he first learns to fly. Carrying a switchblade in his mouth, he circles a wooden statue in his master's condominium and proceeds to hack away at it with the knife.

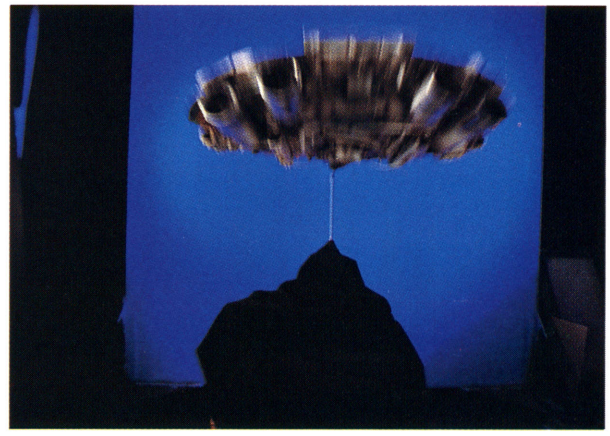
The model head was mounted onto a blue pole attached to a model mover in front of a bluescreen. A frame cut of the previously photographed background plate was placed into the Fries camera, and this was aligned with a videotape of the same shot using a Panasonic MX-50 audio-video mixer. With Full Moon's motion-control rig, the miniature head was positioned to wield its blade in the exact place where the statue existed.

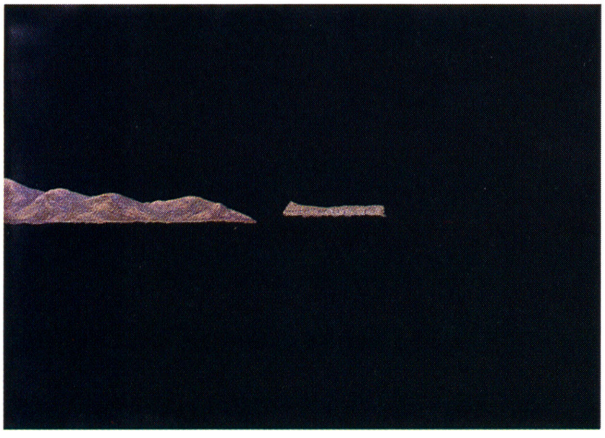
"Originally the shot was kind of bland, with the head circling the object and taking swipes at it with the knife," observed Paul Gentry, VFX Digital's visual effects supervisor and director of photography. "We didn't think it was very dynamic. So we altered the motion-control move to where it looked like the knife lopped off the head of the statue. Then, Chris [Biggs] and Ed [Heede] took the original 2-D background of the statue and removed it and painted in the blurry background, as if the statue had never existed. We put the statue back in as if it had been shot as a bluescreen element. At the point where the knife intersected with the statue when it cuts off the head, the statue was digitally removed. With CoSA it was spun out and blurred and the bottom half was animated to fall out of frame. The only problem with shots like this is that you are taking a 2-D object and flying it around. You obviously can't do anything like flying it toward you while rotating and tumbling it dimensionally. But there are programs coming online, such as John Knoll's Cybermesh, that'll enable you to take 2-D objects and give them three dimensions."

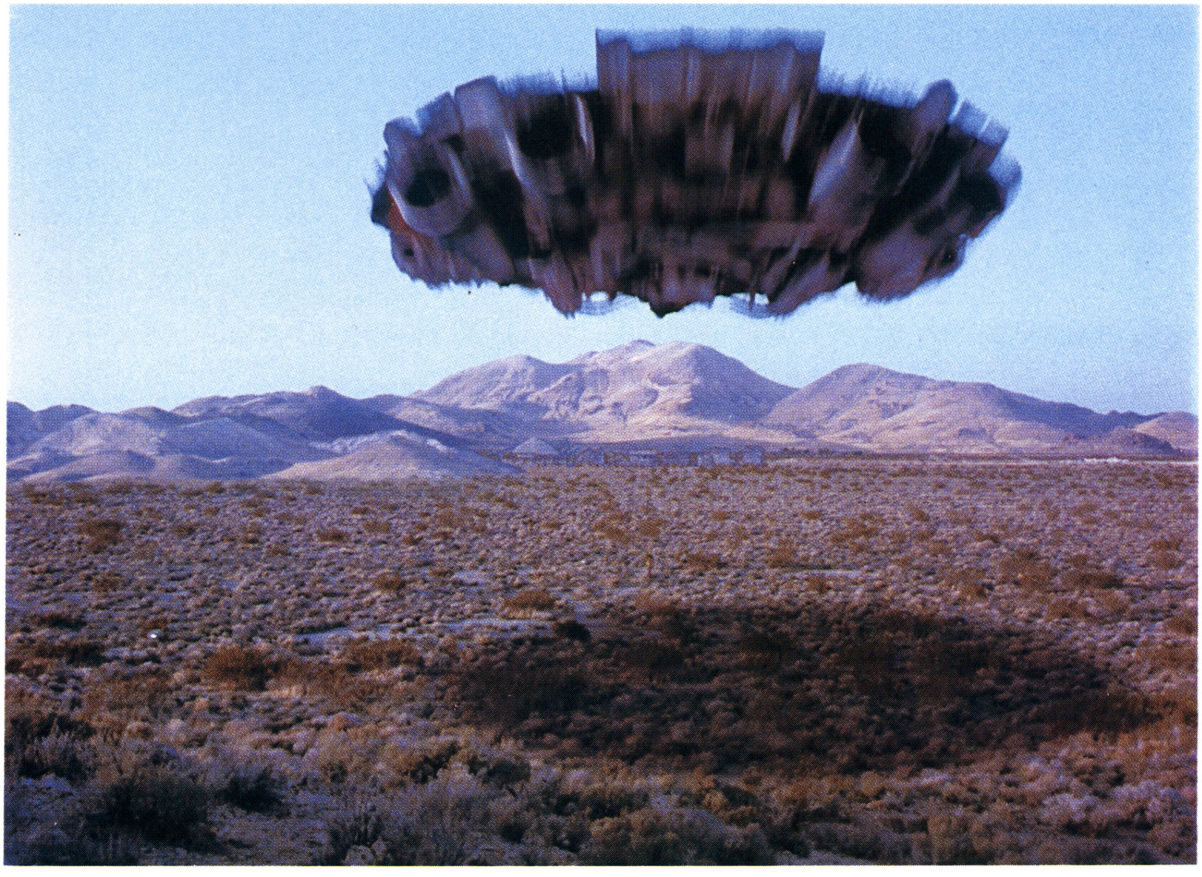
> "... any software graphics programs will still need artists to run them, not techno-brats."

Another shot involved the three heads materializing out of some distant city lights and then flying over a speeding car. Each head was shot separately against blue so that each could have its own independent motion. One of the heads appears to bounce off the front hood of the car as it spins toward the camera. The longest shot to make for the film, taking a total of 40 hours of rendering time, was of shrunken head Tommy hiding inside a female character's blouse.

Gentry's final comments on the whole *Shrunken Heads* experience were mixed: "Unfortunately, *Shrunken Heads* was to be our first 'test' of the digital department, but a film with 54 bluescreens (with multiple elements) is hardly the 'little picture' needed to test the system. Overall, we were not entirely happy with the final look of our output to film, since we went with a company that had built a very 'home-grown' system that was a lot less expensive to use but was still about 30 percent shy in terms of quality, of getting there. We also had major scan delivery problems and breakdowns in their equipment causing the work to suffer greatly due to time lost. Having learned that lesson the hard way, we have since moved on to other scan/record bureaus and much better results. So, 'caveat emptor!' to those seeking only the bottom line in digital scan costs. Having said that, I hope that the better bureaus will continue to drop prices; [otherwise] it will only encourage us to buy the whole system for in-house use, as a lot of effects houses are doing. The day of charging premium prices for digital scans is rapidly closing with the proliferation of systems."







Smaller photos, clockwise from upper left: *A background plate shot at Antelope Valley on 5245; motion-control spaceship element; matte painting element; traditional process composite of painting and plate.* Large photo: *Digital composite of ship, painting and plate with hand-animated shadow.*

Prehysteria, Oblivion and Beyond

Many of senior visual effects supervisor David Allen's shots for Full Moon involve the digital compositing of rod-puppet creatures into already photographed background plates. In *Prehysteria 2,* there is a shot of a baby chasmosaurus running across a highly reflective museum floor. The puppet was actually animated to run in place by four puppeteers using slots cut into a piece of reflective mylar in front of a bluescreen. The mylar acted as a mirror to reflect the blue under the puppet. The rods were painted the same blue color as the background screen, and thus became as neutral as the background blue. A motion-controlled diagonal camera move gives the effect of the puppet running across the frame. The model was composited into the shot using Photoshop and CoSA AfterEffects. Its reflection on the marble floor was achieved by flopping the image, adding distortion, then repositioning it at an oblique angle beneath the running puppet.

Effects supervisor Chris Endicott oversaw a similar effect of a tiny pterodactyl flying through the doorway of a greenhouse. A simple split-screen matte of the door was made in Photoshop as the creature disappeared behind the wood. Often when a camera move is not possible to give apparent motion to a creature, the puppet is shot full-frame, running in place, to obtain the best possible resolution. The model is then taken into CoSA AfterEffects and a digital ADO moves it across the screen, adding motion blur, as in the shot of the baby dragon scurrying through the forest in *Dragonworld.*

For *Oblivion 1* and 2, various shots of a spaceship landing in the desert were filmed via motion control. These were digitally composited using the techniques previously discussed. However, the opening title shot for the movie had its share of problems when smoke, an exhaust glow and a shadow all had to be added "after the fact." The model had not been designed with the idea of adding a smoke jet or a separate light pass inside the engines. Thus, computers were required to "fix it in post."

Ed Heede animated the ship-shadow by creating a basic shape in Photoshop as an alpha channel or matte and then animating it by resizing and tracking it with CoSA. Opacity of the shadow was also adjusted by CoSA.

To create a ship engine's exhaust, CO_2 was forced out of a vacuum hose and photographed in the correct orientation with a Canon Hi-8 consumer camcorder. This video footage was transferred to the Mac using a VideoSpigot card and reduced even further. Because the smoke appeared so far away in frame, video resolution was not an issue. Since the smoke had been shot stationary, Heede had to align it to the pre-existing ship footage. He animated it as the ship landed, cutting off the top of the smoke layer frame-by-frame so it wouldn't pop up above the ship. The carbon dioxide exhaust dispersed against black velvet and actually looked like it was kicking up dust.

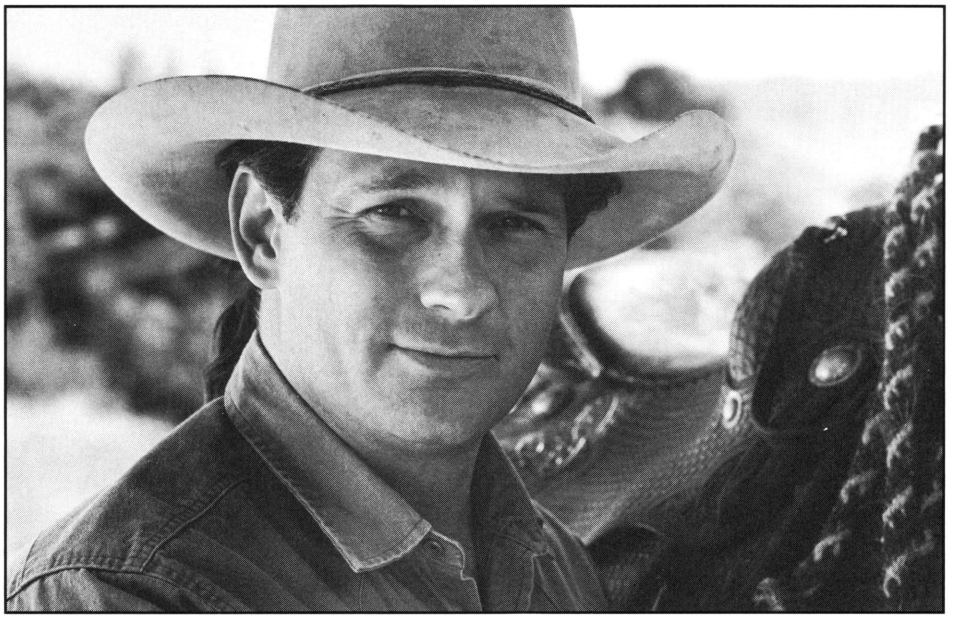
According to Heede, "Using video as a quick way to introduce small elements is great since you bypass film, lab and scanning charges, and it can be quickly loaded into the system and set up into the shot in minutes. Obviously, you are limited to 30 fps and whatever resolution your video camera and video card are capable of." The film's titles were made with a 3-D Infinity program. A matte painting of the mountains, by Heede, and the town of Oblivion, painted by Harry Walton, were also added in the same scene.

The spaceship landing on a roller coaster track was even more difficult to accomplish. The camera move which gave the ship its apparent motion had to be programmed frame-accurate to match the speed of the original model used on location. To create a residual glow for the engine exhaust pipes, Chris Biggs took the actual plastic exhaust of the model and poured silicone into it to make a mold. He cut it in half, made an enlarged Xerox copy of it and laid it on his WaCom Graphics Tablet. He prefers this digitizing pad to others because it is thinner, responds faster and comes with a plastic film which lays over the artwork, holding it in place while it's traced. He next copied the outline into the Infinity program, spinning it into a three-dimensional shape. Using a combination of Infinity and Photoshop, he created texture maps. With Stratovision fog filter effects he put a bright light inside to simulate thrust coming out of it, similar to the glowing exhaust from the *Alien* films.

"I'll bring in a QuickTime image of the actual spaceship landing and line up the separate elements of the exhaust effects. I'll check it every five frames for alignment, using a quick render, then bring it all into CoSA as a separate element," he added.

Digital supervisor Paul Gentry prefers electronic compositing to optical printing because there are no noticeable matte lines. One can pull a previous sequence of images from many backgrounds, or render elements straight onto those backgrounds. The foreground elements end up becoming anti-aliased to the background elements. There is absolutely no stair-stepping on a diagonal matte line. The computer averages out the pixels to make a fine gradation between the color of the foreground object and the color of the background object. One achieves perfect anti-aliasing together with no semblance of border detection, which can be a problem with traveling mattes, since the human eye is like a built-in edge detector.

With this in mind, Full Moon Entertainment's VFX Digital department is not above using traditional opticals when the need presents itself. For the film



Randall Gregg is entitled to wear the hat: he used to be a professional rodeo cowboy. Since 1974, he has worked on features and videos; and on commercials with such film makers as Leslie Dektor, Amir Hamed, Jim Manera and Fred Petermann.

"We weren't even using Clairmont's cameras on that shoot. But when we had a mystery problem, I sent them footage and Clairmont solved it," says Director of Photography Randall Gregg.

It turned out to be some latent edge numbers fogging part of the image area. The rawstock manufacturer later withdrew the whole batch.

"The film fogging episode happened years ago," says Randall Gregg, "But it shows how *accessible* everybody is at Clairmont."

New at the job

"I was new to L.A. I was new at being a First Assistant. We were on location out of town. When we got a phone call from our editor telling us we had light-struck dailies, I knew I needed help."

Blame the crew

"We were renting from another rental house—not Clairmont—because the producer had a deal of some sort. And now he was blaming the crew and the camera, naturally enough."

Called at home

"I called Denny Clairmont at his home. He said: "If you'll send me a piece of the footage, I'll solve your mystery." Which he did. It wasn't his camera, it wasn't his job, it wasn't his problem. But he took care of it."

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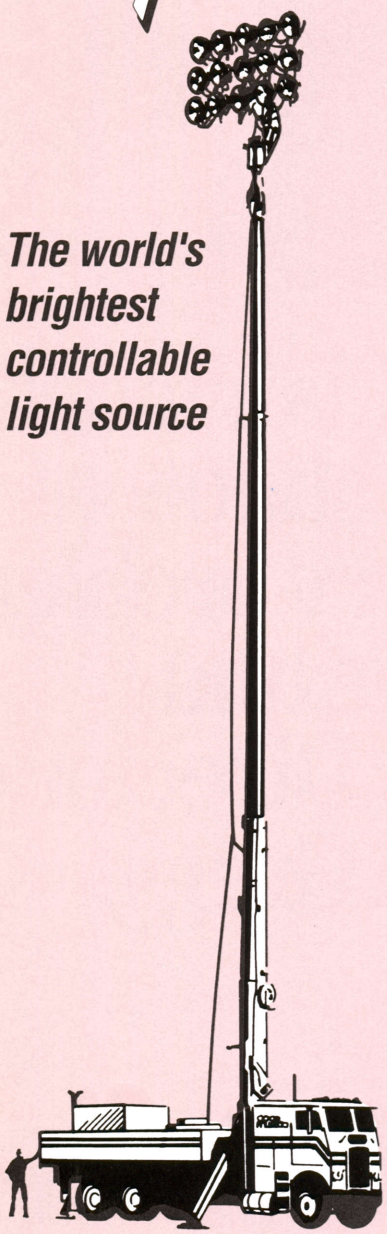
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Dark Angel, a 45-inch-diameter glowing plexiglass sphere was superimposed over shots of the angel floating around her parents' room. This effect was patterned after the optical of Glynda, the Good Witch in the 1939 version of *The Wizard of Oz*, but aligned in the camera using today's technology. A videotape of the pre-existing footage, striped with timecode, was repositioned to fill the Fries camera videotap ground-glass markings, using the Panasonic MX-50 frame grabber and digital-shrink button. The tape was then synched to the motion-control rig by means of the timecode-trigger start switch built into the Kuper RTMC software. This enabled the cast and crew to witness the finished composite after each take on video, engaging the MX-50's luminance key capability. The stage had been previously draped with black Duvateen to negate the need for any garbage matting by the optical company doing the composite. Gentry wanted to make it as easy as possible for the technician performing the optical.

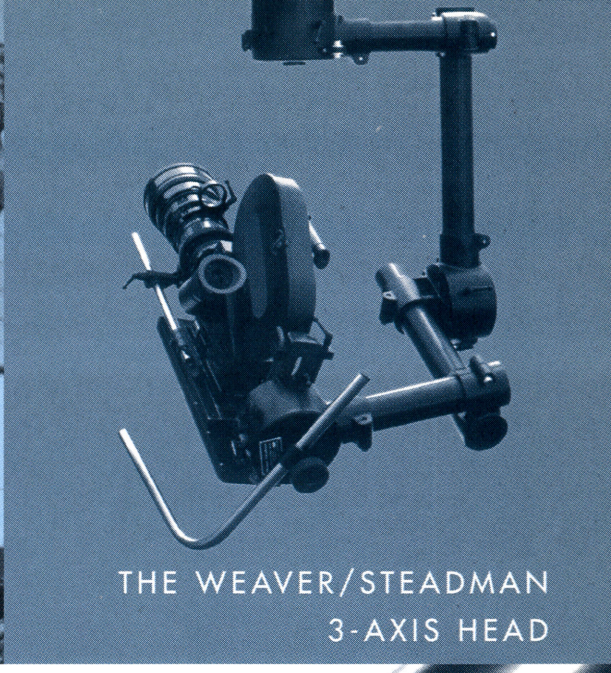
Gentry felt that this simple superimposition technique was the best, least expensive and easiest method for achieving this particular effect in the film. "Simple split-screens and some double exposures are always required, and the turnaround time is still cheaper and faster with opticals," he admitted. "The big bugaboo with digital composites is 'shot length.' As far as bluescreen shots are concerned, I'd rather do them digitally. But long takes and shot elements requiring intricate fog/diffusion effects are still cheaper to do on an optical printer. The image loss in a good optical is practically imperceptible. Digital still has to work hard to have comparable image fidelity."

Gentry believes that motion-controlled models and opticals are not obsolete. There can be a symbiosis with CGI in the future, compositing traditional effects digitally inside the computer, although he admits that people assumed there would be a longer transitional period where the two techniques co-existed. "I think a lot of people felt cheated because after we got these great computer compositing machines, we didn't get to use them solely to composite [traditional effects]. But CGI has come along about as rapidly, almost eliminating the need for models or miniatures, and probably people next, but it's not totally economical yet."

Programmer Chris Biggs doesn't care which computer platform he works on, as long as it gets the job done. "Basically, we use Macintosh because we started off with a lot of Mac hardware and software and don't want to invest in another format, especially since we are at a crossroads with computers right now. The IBM PC also has some good, sophisticated low-end graphics software. But the future's about to change in a big way, and we don't want to invest in the wrong thing.

"The next generation of computers won't have a keyboard. You'll talk to them and they'll talk back to you. Instead of physically typing in something, you'll just speak the words, and instead of having a mouse, you'll just use your finger and point. Just like in *Star Trek*, they have voice recognition now, but you must say the word over and over again using the same inflection."

Biggs demonstrated a slide show of a new program called Bryce, whereby the computer creates 3-D landscapes and environments right in its own artificial universe. The neat thing about Bryce is that one doesn't have to be a skilled artist to use it. Biggs indicated that it was acquired and further developed by Kai Krause, the maker of KPT software (Kai's Power Tools). Krause interfaced the algorithmic generator to work on a Macintosh computer which manufactures environments on a digital level, akin to the Genesis Experiment CGI in *Star Trek II* and *III*.



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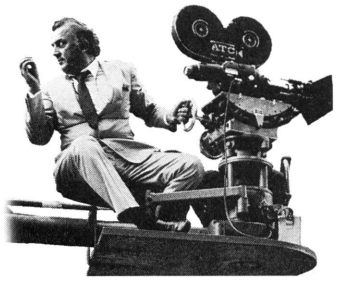

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"All you do is set parameters, telling the program how much you want of this and that, and which color scheme to work with, and it does the rest. You can use real, everyday images to create fantastic artwork (such as a photograph of a person), but because you're using highlights and shadows it creates weird environments. There are no pre-existing models or images; you just tell it which textures you want, colors, elevations, sun angle, ambient light level, rock formations, snow, water, cloud movement, etc. It'll probably sell for only $100 and be out by the time you read this. It'll put a lot of matte painters in a major hurt. But any software graphics programs will still need artists to run them, not techno-brats."

Although Full Moon uses low-end gear, this doesn't mean they wouldn't like the more expensive digital toys. As Gentry commented, "I'd be a fool if I didn't say I wouldn't love to have SGI Onyxes galore and plenty of Flame, SoftImage, Flint, Matador, and whatever else to work with. But it works against my low-budget approach for Full Moon, a company which needs to watch the bottom line very closely. The price we pay is not being exactly state of the art, but the tools available to do this stuff inexpensively are here now. We're just driving digital Volkswagen Bugs while others are driving Ferraris. We still both get to where we want to go."

The next generation of Macintosh will incorporate a new RISC chip (Reduced Instruction Set Chip) which is what SGI machines are based on. "Being cutting edge, like ILM, does have a hefty price tag. Eventually we'll have what ILM's got in their lap now," concluded Biggs. "In about two or three years we could have it sitting on our desktop for a fraction of the cost. They're spending millions; we'll spend a couple grand!"

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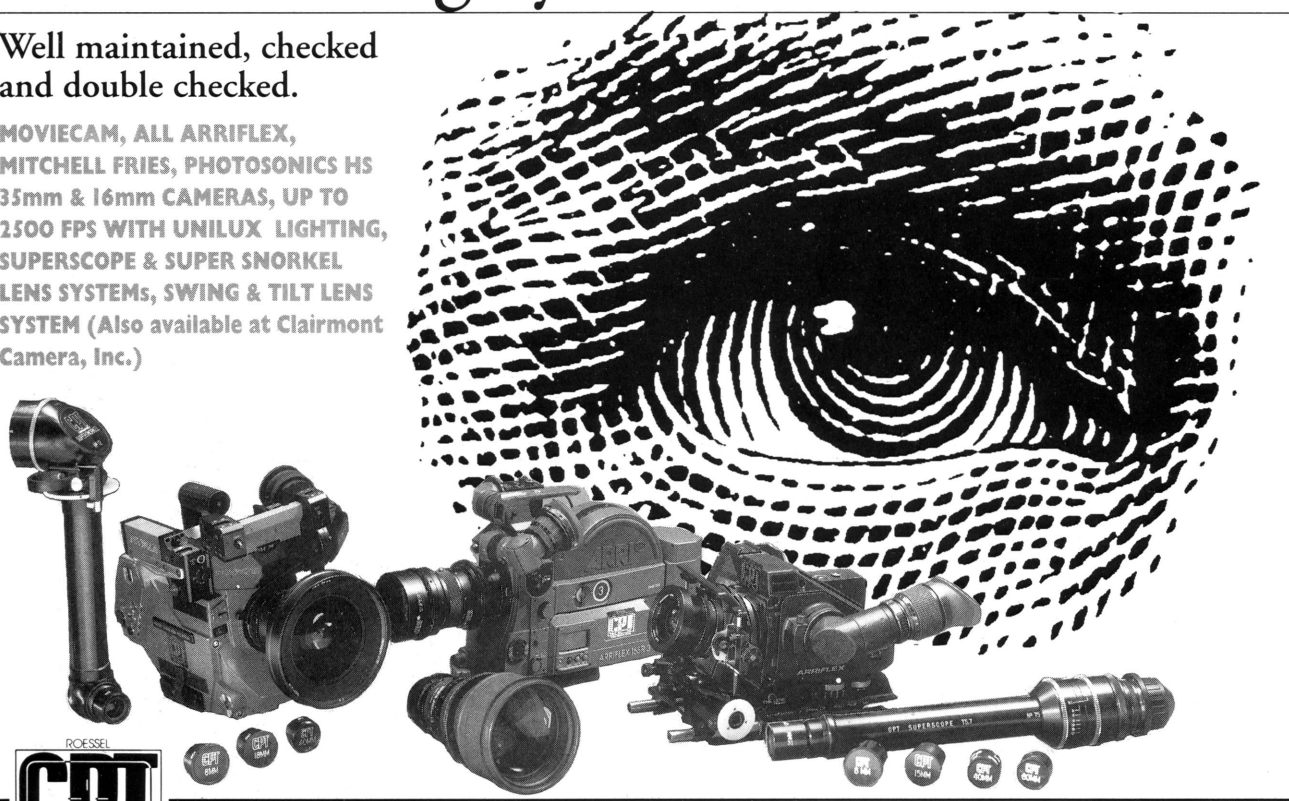

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"Supercop" Jack Scagnetti (Tom Sizemore) holds Mallory (Juliette Lewis) at knifepoint to elicit Mickey's surrender during a shootout. The "sickly green hue" reflects the characters' psychotic instability.

Violence has always played a prominent role in American cinema, but pure carnage — and the psychotic mindset that accompanies it — has never been conveyed as hyperrealistically as it is in *Natural Born Killers*.

A satirical joyride through what director Oliver Stone terms "the schizophrenic madness of modern society," *Killers* tracks the bloody exploits of ruthless, romantically entangled serial killers Mickey and Mallory Knox (Woody Harrelson and Juliette Lewis) as they cut a savage swath across America. Along the way, the deadly duo are glorified by blustering, ratings-obsessed tabloid television commando Wayne Gale (Robert Downey, Jr.), whose show, *American Maniacs*, helps turn them into pop icons. Mickey and Mallory are eventually captured after a frenzied shootout with a battery of police led by psychopathic, publicity-savvy "supercop" Jack Scagnetti (Tom Sizemore), who turns his quarry over to an equally venal prison warden named McClusky (Tommy Lee Jones). In a climax that underlines the absurdity of

Photos by Sidney Baldwin, courtesy of Warner Bros.

Natural Born Killers Blasts Big Screen With Both Barrels

Director Oliver Stone and cinematographer Robert Richardson, ASC empty the cinematic clip in kaleidoscopic tale of serial murder and media mayhem.

by Stephen Pizzello

Produced by Jane Hamsher,
Don Murphy and Clayton Townsend
Directed by Oliver Stone
Director of photography,
Robert Richardson, ASC

life in the Media Age, Mickey engineers a daring escape from the prison when a riot erupts during his live, exclusive interview with Gale on Super Bowl Sunday.

Although *NBK* echoes the themes of such previous films as *The Wild Bunch, Bonnie and Clyde, A Clockwork Orange, Badlands, Taxi Driver, Network* and *Wild at Heart,* its unique visual style is a striking example of cinematic experimentation. In crafting the film's garish, eye-popping psychological mindscapes, Stone and cinematographer Robert Richardson, ASC combined a wide variety of shooting formats (color and black & white 35mm, black & white 16mm, Super 8, Hi8 and Beta), with front- and rear-projection photography, bits of heavy-metal animation, stock footage and clips from other films, including several of Stone's previous projects. The filmmakers further enhanced this hallucinatory brew with offbeat lighting schemes, unusual angles, subjective camera techniques, a fractured, stream-of-consciousness editing style and a daring soundtrack that serves as an aural

collider by juxtaposing wildly diverse musical samples (in one particularly inspired moment during the film's first scene, a snippet from a Puccini opera is stitched to the guitar-heavy grunge of the rock group L7).

Asked to explain the genesis of the film's radical style, Stone replies, "We were simply trying to tell the story in a new, interesting and innovative way. I didn't want to portray realistic murder because it's been well done by Richard Brooks in *In Cold Blood* and by John McNaughton in *Henry: Portrait of a Serial Killer*. My attitude on *Natural Born Killers* was more influenced by combinations of Godard, Peckinpah and Kubrick — the ferocity of Peckinpah, and the satire and dark humor of Kubrick. We started using some of the specific techniques in this film on *JFK*, and the success of that picture gave us the confidence to push those techniques much further on this project. The style we chose was perfect for this particular film; it reflects that hallucinogenic quality that is in the killers' minds. But your approach depends upon the material. I don't think you can rock 'n' roll all the time; sometimes you've got to do a slow dance."

With its array of shifting perspectives and flash cuts, *NBK* has led a number of pundits to conclude that Stone's visual style was intended to simulate an evening of channel-surfing. While Stone confirms that this was part of his intent, he explains that the overall visual plan for the picture was more ambitious, involving some key dramatic transitions. "At the beginning of the movie, these two young people are really desensitized to violence," he notes. "The concept is that they live in a TV world and don't realize the consequences of their actions. They also live in a world of rage and anger because of their abusive parents and because the nature of the Twentieth Century has been very violent. We incorporated those ideas into the movie by using rear-screen images. We wanted to give a sense of the schizophrenic madness of the century, and to convey the feeling that the characters' minds are hopped-up and speedy. That style prevails in the first part of the film; it's a thrill ride, and it's supposed to be fun. As horrible as it sounds, these characters enjoy killing."

The style of the film changes subtly after Mickey accidentally murders a sagelike Indian man who has provided the bedraggled, drug-addled couple with food and shelter. "At that point, Mallory gets off the ride and condemns Mickey," Stone relates. "Shortly thereafter, they're bitten by rattlesnakes and the whole mood of the lighting changes into a greenish, poisonous hue to reflect the idea that the fun has ended."

Other styles were used to reflect the warped world-views of the Geraldo-like Gale, sleazy cop Scagnetti and the paranoid Warden McClusky. "With Robert Downey, we used a 'television magazine' style. In the case of Tom Sizemore, Bob and I were trying to create a lurid, pseudo-Mickey style because Scagnetti wants to be Mickey and possess Mallory; the lighting is tawdry. And when Tommy Lee comes in, we move to his character's view of the prison, which consists of images of large, looming black men who don't speak. He doesn't understand them, and there are a lot of fractured cuts. I wanted to create a scary, ominous prison that suggested punishment.

"At the conclusion of the film, during the prison riot, the look is one of complete chaos — everything but the kitchen sink," Stone concludes. "In a sense, it's supposed to be the end of the world, with the prison representing the world."

To bring this metaphorical funhouse mirror to fruition, Stone elicited the aid of longtime friend and collaborator Richardson, who has served as director of photography on all of the filmmaker's pictures since 1986's *Salvador* — a formidable list that includes *Platoon, Wall Street, Talk Radio, Born on the Fourth of July, The Doors, JFK* and *Heaven and Earth* (Richardson earned Academy Award nominations for both *Platoon* and *Fourth of July*, and won the Oscar for *JFK;* he has also shot *A Few*

In a flashback sequence that mocks television conventions, delivery boy Mickey (Woody Harrelson), bearing "fifty pounds of beef," encounters his soulmate. To simulate sitcom visuals, Richardson shot the flashback in the Beta format, using Ikegami cameras. Victor Kempster's strategically tacky interior decorating heightened the illusion.

Richardson used handheld techniques to capture Mickey and Mallory's savage murder of the latter's abusive father (Rodney Dangerfield). The sequence was shot at varying speeds (ranging from 6 fps to more than 24 fps), and post techniques were used to lend the death-struggle a "swirling" quality.

Good Men for Rob Reiner and *Eight Men Out* and *City of Hope* for John Sayles). This time around, however, Stone encountered uncharacteristic resistance from Richardson, who concedes that he had an "intensely negative reaction" to the *Natural Born Killers* script.

"The situation, quite clearly, was that I didn't want to do the film," Richardson reveals. "I simply didn't have the level of respect that I'd had for the written material on, say, *Born on the Fourth of July* or *JFK*. Each of those aroused in me a great deal of historical respect and intellectual curiosity. I really attacked this project as pure imagination, but Oliver grasped that element and pushed it further than I might have been willing to go."

Stone, for his part, freely admits that he played the "friendship card" in his attempt to persuade Richardson to shoot the picture. "I feel a lot of love for Bob; he's a friend, and I've grown with him over the past nine years. He was in a strange place on this movie. I was in the middle of a divorce, so I was in a very difficult place myself. I felt like he was abandoning me, and I asked him to stay on because I was feeling very vulnerable. He did not like the material in its scripted form. As far as the morality of the story was concerned, I argued with him that it represented the culture we were in, and that the picture was a satire, which required us to exaggerate and distort in order to make our point. That's what satire is — making things larger so you can examine them."

Richardson finally acquiesced, and that decision led to one of the most harrowing periods of his life. "I only agreed to do this film out of love for Oliver and our relationship; he's like an older brother. But once I began the process, it truly became a nightmare for me. Making this movie was like reading Jung's *Man in Search of His Soul*. The story brought up unpleasant memories from my own childhood, and those memories plagued me to such a degree that my nights were literally sleepless. I became heavily dependent upon sleeping pills to get me through the night, and each day was just a living hell. To make things worse, my wife almost died from a serious illness while we were scouting locations, and my brother went into a coma near the end of the shoot.

"All of these problems translated into physical and mental angst on the set. I was very hard on my crew (which included key grip Chris Centrella, chief lighting technician Ray Peschke and first camera assistant Gregor Tavenner), but most of the guys I work with are close friends, so it's a bit easier to get through those abusive moments.

There's no question in my mind that I was extraordinarily weak and abusive on this show. At times, I was very rude with Oliver because of the pain I was feeling. A tremendous number of demons came up through my body during the shoot; this picture almost resulted in a divorce with my wife, and it was ultimately the reason I moved out of Los Angeles. In the end, though, all of the strife was what provided me with the creative juice I needed to deal with the project. Had I been in love with the material, I might not have been so aggressive in my approach; my angst wouldn't have been as much a part of the camerawork. I might not have been as willing to overstep the boundaries of what we commonly want to do professionally in our business, and that would have resulted in a different film, one that might not have been as successful for Oliver."

"What makes me happy is that Bob seems excited by the results," Stone says. "He was in contradiction with himself, but I think that gave his work a lot of energy. At first I'm sure he was thinking, 'I'll just do it to make Oliver happy, then I'll forget about it.' But now I think he's really proud of his work, and he should be, because it's outstanding."

During preproduction, Stone and Richardson conferred closely with production designer Victor Kempster and editors Hank Corwin and Brian Berdan; Richardson maintains that the finished product is an amalgam of the quintet's individual cognitive processes. "What's fascinating about this project, in my mind, is that it mirrors the attitudes of the filmmakers. Most obviously, it represents Oliver's mental workings, but it also reflects the interests of Hank, Brian, Victor and myself; I guess we could all do with a little therapy," he says, laughing. "When we became aware that we wanted to treat the material in a more surreal or even Cubist manner, we held a lot of discussions. In all of the various departments, we were attempting to deal with the subject matter of schizophrenia and psychopathic attitudes — a grotesquely aberrant collection of nightmarish actions. I think one of the things that's most successful about the film is that the burden of its narration isn't placed upon dialogue as much as it is upon metaphorical connections. For me, it's not simply the visuals — it's the brilliant things Oliver did with the dialogue, the music, the effects, and everything else. After all of these 'samples' have been tied together, each layer helps to illuminate and define what the picture is. When you look at our landscapes, whether they're manmade or natural, they're really intended to evoke the characters' states of mind, emotions and experiences. Hank and Oliver could cut away to a flower as opposed to the exterior of a building, and the flower would say something about what was happening in a more interesting way than just defining the landscape physically. The approach we chose says more about the characters' mental landscape. I've always been a big admirer of Antonioni's films, especially *L'Avventura*, because he was always very successful in achieving a sense that a location *was* a character."

"There was nothing straight ahead or linear about this project," notes editor Corwin, who first began collaborating with Richardson on television commercials. "The script was almost like a blueprint. The use of the mixed formats really dictated how the film was cut. Fortunately, we were using a Lightworks random-access system, so the formats didn't really affect us that much — everything was entered into the computer before we started cutting.

"We'd start cutting right after we got the dailies," Corwin adds. "Oliver didn't want to be there while we were cutting; he had no desire to put any restrictions on us. We'd talk to him and find out what he was thinking, but then he'd just clear out and let us cut. Later on, we'd present the material to him, after which we'd recut it or fine-tune it. Some scenes were fine, and others he made us cut 40 times. He gave us a lot of freedom, but he also managed to personalize the material. The process was a constant exploration."

Richardson: "Personally, I never saw this film as a direct affront to anybody, or as an attempt to break rules. We needed to be as off-balance as the characters were."

NBK's jagged, schizoid visuals — which occasionally included purposely "sloppy" techniques — ran counter to Richardson's perfectionist impulses, which have become deeply ingrained over the years. Stone jokingly notes that *Killers* "breaks all the laws of cinematography," but Richardson had a difficult time breaching those hallowed boundaries. "Oliver was constantly needling me in that regard," he recalls. "I'd be shooting a sequence, and he'd say to me, 'Bob, are you shooting for your peers today?' Personally, I never saw this film as a direct affront to anybody, or as an attempt to break rules. We needed to be as off-balance as the characters were. Once we decided on that approach, it didn't make a great deal of sense to enter the arena without oscillations that were equally schizophrenic and psychopathic. That was my goal, it was Oliver's goal, and it became the editors' goal; everything is dependent upon being fractured, and it's a cumulative

A benevolent Indian takes the killers into his "hogan." A special structure was created on set; Richardson poured hot light down through the dwelling's overhead opening.

effect of the various layers.

"If we hadn't gone in that direction, there were several other options. I could've seen shooting the picture extensively on black & white 16mm. But Oliver didn't feel that that was enough of a creative ledge. He wanted to pursue something larger."

The filmmakers' anarchic intent is introduced in a shockingly graphic opening sequence, during which Mickey and Mallory annihilate a group of ill-mannered rednecks in a desolate roadside diner. The scene begins peacefully enough, with Mickey ordering a slice of key lime pie from a waitress at the lunch counter. Moments later, however, Mallory stirs up the locals by indulging in a sexually provocative dance routine near the diner's jukebox. A pair of truckers arrive in the midst of her performance, and when one of the men makes a series of crude advances toward Mallory, she turns on him with the fury of a scorpion that's been poked once too often with a stick. As she beats the much bigger man to a pulp with her bare hands, Mickey guts his companion with a Bowie knife, guns down an obese female cook, and thwarts another patron's attempted escape by tossing his knife through a plate-glass window and into the man's spine. With just one quaking cowboy and a frightened waitress left alive, the couple must decide whose life to spare (as Gale later notes in one of his hyperbolic, Aussie-inflected broadcasts, "Mickey and Mallory always leave one victim alive — to tell the tale!"). They make their choice by forcing the two unlucky souls to submit to a gunpoint game of "eeny meeny miney moe." The wailing waitress loses and is felled by Mickey's bullet.

The diner sequence was shot on both 35mm and high-speed 16mm black & white stock, and other attention-getting tactics were employed: when Mickey shoots the cook, the audience views the killing from the perspective of the spinning bullet; the same POV is employed when he hurls his knife at the fleeing cowboy. Both shots were accomplished with the help of fairly simple mounts developed by effects expert Matt Sweeney. The prop bullet and knife were attached to metal rigs that extended in front of the lens, and the camera was then dollied slowly toward each victim as the weapons revolved. Richardson explains that the unusual perspectives were intended to prepare the audience for a new visual experience. "With the first shooting, where the bullet is revolving in front of the camera, you're really jumping off stylistically, and it clearly sets the tone for what will follow. The language has been stated: what you're about to see is not realism. The 'eeny meenie miney moe' sequence has its own humorous point of view, because the camera views the scene from Mickey's perspective, as if the viewer is holding the gun. Normally, you'd cover that action with an objective camera which would witness the overall schematics of the scene."

Richardson adds that the mixing of film formats, which may seem random to the casual viewer, actually serves a predetermined philosophical strategy. "For the 35mm sequences inside the diner we went with non-fluorescent lighting; we used HMIs through the windows. With the other stock we cut in for the scene, the 16mm high-speed stock, we went with almost everything, and had overhead fluorescents working. The idea was that we would introduce characters in 35mm establishing shots, which then became the generic foundation for the black & white inserts. The black & white wasn't used until the aggressive movement by the cowboy during Mallory's dance. Most of the black & white was used for the violence, except for shots that provided pinpoints of color, such as the green pie, the records inside the jukebox, or blood on the tables. If we had decided to shoot the initial fight sequence between Mallory and the cowboy entirely in color, it might have altered the rest of the sequence as it played out. Instead, we isolated certain parts of the violence in the highly grainy black & white so it would be a shock to come out to 35, with extremely strong, clean colors.

"Specific shots were also intended to heighten the power of a kill," he adds. "For example, we did one shot in which the bullet did not stop in front of the cook's head, but actually continued to the point of impact. It just kept going and smashed into her brain, and the wall was shot in both black & white and color so that a post decision could be made about how to temper the effect. Many of our shots were so experimental that we would often duplicate them another way if we had fear about whether it would be too excessive or whether it would line up with another, more conventional shot. We had to find a way to make the connection between shots, or our compositing rhythm might have been entirely thrown off. Much of the success of our approach was in the layering, and we had to make a great number of decisions based upon that consideration."

This loose, improvisational shooting style prevailed throughout the shoot, although Richardson notes that some scenes were meticulously preplanned and carefully controlled. "There was a lot of spontaneous stuff going on in the movie, particularly with action. This film was as close to a documentary as you could get, in terms of the rendering of the material. But certain sequences were quite clearly defined visually — such as the moment when Scagnetti strangles the hooker, or the gas station sequence, or the wedding sequence. In those instances, it was well known what each shot would be."

Stone maintains that while he and Richardson have worked out a fairly standard division of duties during their many years together, he always encourages as much improvisation as possible from everyone

Right: ***Richardson (in back seat with camera) and Stone (wearing headphones) join the outlaws on their "joyride."***
Below: ***Mallory dances on the car hood while contemplating her spiritual link with Mickey. To give the actress a sensuous glow, Richardson "bashed the back of her head" with a Xenon light. The camera was locked off at the location so that Pacific Data Images could later add dreamlike effects images to the night sky.***

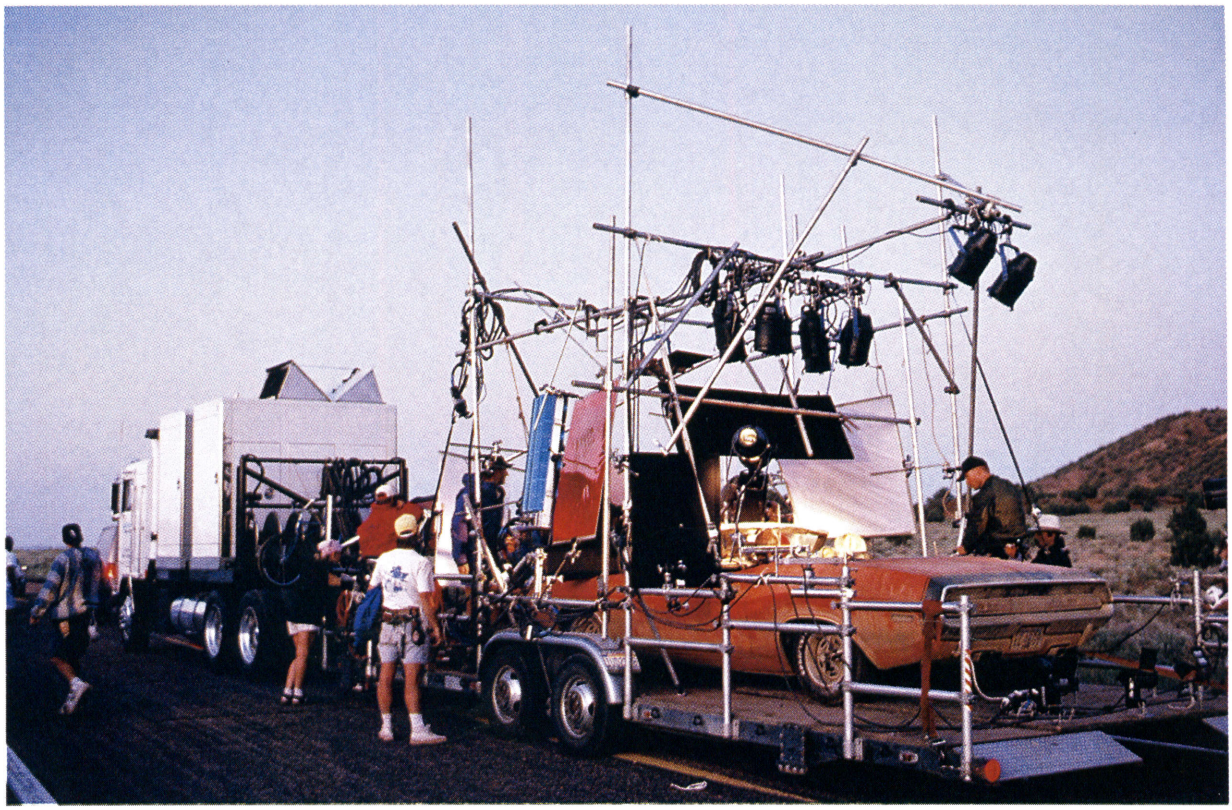
Suffering from mushroom-induced hallucinations, Mickey and Mallory are tormented by imaginary demons. Most of the driving footage, which included many rear-projection shots, was filmed on a stage in Los Angeles.

involved in a production. "The lighting is pretty much Bob, but we do talk about it. Framing is pretty much me, but he gives me very good suggestions. I feel that camera position is really part of the director's approach to the scene. I also think the director serves the idea, and should encourage everyone to collaborate. The director has to maintain the organization in terms of moving the scene on; he has to keep to some sort of time schedule. This was a very complicated film, and we shot it in just 54 days.

"During the shoot, I make shot lists for each coming week," the director continues. "I generally don't like to hand them around, because I don't like the sense of everyone getting into a predictable rhythm. If everyone knows the course of the day, that sense of experimentation and spontaneity gets lost. Things change as we shoot. If I have a nine-shot scene, and something happens on the set that works, my nine shots could become six shots, or four shots. What I'm always trying to do is shortcut. Bob knows exactly what I have in mind, and I usually tell my AD about the day. But I don't like to hand things around; the key people know what I have in mind. I like the energy of all of the various forces on the set flowing together, but I like to guide it and get us out of there so we don't degenerate into a self-indulgent mess."

That sense of discipline is a bit more difficult to maintain on a picture as unusual as *Natural Born Killers*, but Stone and Richardson conceptualized the use of the various film formats to maintain an overarching sense of organization. "One of the ideas we came up with was to break the film down, piece by piece, into textures," says Richardson. "The most obvious way of doing textures is with production design — walls, colors, and so forth. But that always left me with a fear that financially, or simply because of logistics, we wouldn't be able to control those textures to the degrees that were necessary. And a lot of locations were not allowing us to get beyond the simply bland or slick walls. What started to get driven in as these locations unfolded, and as our minds got stretched further and further, was going back to 16mm black & white, and figuring out how we could utilize the grain structure, how we could break down into Hi8 or Super 8."

A good example of this strategy in action occurs during a scene in which Mickey and Mallory, under the influence of psychedelic mushrooms, have an argument about fidelity in the midst of a desert expanse. "Although we were at a beautiful location, we tried to find some visual opposition to represent the characters' conflict," says Richardson. "One of the decisions we made with that particular sequence was to punctuate it with silky 35mm landscapes, which we then tore apart with some highly improvisational Super 8 shooting. The Super 8 footage was extremely grainy, but still managed to reproduce the elements of color in the location, which was mostly reddish. As the argument progressed, we



The killers' car is placed on an 18-wheeler equipped with elaborate rigging to facilitate lighting for "driving" shots.

went a little wilder with the handheld black & white.

"Moments like that were how we found out, as we went along, that some dramatic elements worked better with certain formats. But it wasn't like Super 8 always represented a 'breakdown.' Some of the most loving material, such as Mickey and Mallory's impromptu wedding on the bridge, was also shot on Super 8. For that scene, we shot Super 8 footage of them kissing, with one piece of black & white mixed in. We decided to go with Super 8 because it had a 'home movie' quality that felt extraordinarily real for that moment; going back to 35 right there would have felt too commercial, and not as genuine in spirit. So there was no set 'recipe' for the formats — we never said to ourselves, '16mm black & white is gritty and rough, so it's meant for abusive moments.' Our strategy wasn't that easily defined."

In rendering the different looks, Richardson made use of a number of photographic systems. 35mm footage was shot in the 1.85 format using a Panavision camera and Primo prime lenses, as well as 11:1 and 4:1 zooms and a Cooke zoom. He also had an Aaton 35mm camera on hand. His 16mm package consisted of an Arriflex camera and Zeiss lenses. Super 8 scenes were shot with a Beaulieu system, and Hi8 was accomplished with a Nikon camera. For a major sequence intended to have the look of television sitcom, Richardson employed an Ikegami Beta system.

The cinematographer's 35mm stocks were Kodak's 5248, 5293, 5296, a bit of 5297 and some 5298 (the 98 stock only became available at the tail end of the shoot). 16mm stocks were Tri-X (high-speed) and Plus-X, as well as some Kodachrome and a bit of Ektachrome. For Super 8, he shot mainly Kodachrome with some Ektachrome, as well as high-speed black & white.

Filtration included 85s, NDs and ProMists, as well as the occasional low-contrast filter. Richardson used some black & white filtration for his 35mm black & white footage, but most of the film's black & white shots were rendered in 16mm. The black & white 35 was used selectively to heighten specific moments.

Both Stone and Richardson felt that the mixed formats helped them overcome logistical difficulties, such as a short schedule and sudden shifts in the weather, while also allowing them to take advantage of unforeseen photographic opportunities.

"We ran into a lot of weather changes at Stateville Prison in Chicago, such as storms, which changed our lighting and the look," Stone relates. "But the different stocks gave us a wide latitude, so if the weather hit the shit we could just go to black & white and make it grainy!" He pauses, laughing at the cinematic irreverence of this concept, then strikes a more serious tone. "I'm not the kind of director who likes to stop working; I like to keep the energy going. Bob has been terrific in that respect; he's flexible enough to

keep shooting and find a way to do it, no matter what the circumstances."

Says Richardson, "To some extent, switching formats helped us deal with a very fast schedule and a lot of locations. Varying formats relieved me of the need for consistency in the most obvious way. 35mm calls for you to do your very best work; it says to you, 'Please treat me gently.' As a cinematographer, it's ingrained in me to be loving, to try to produce the most appropriate imagery that I possibly can. Using video and 16mm throughout this pictured trained me step by step to give up that fear."

Richardson's abandonment of his usual aesthetic instincts reached a peak while shooting a surreal sequence in which Mickey recalls his first meeting with Mallory. Rather than presenting the scene as a straightforward flashback, the filmmakers used the Beta format to create a warped situation comedy called *I Love Mallory*, starring Rodney Dangerfield as Mallory's repulsive, sexually deviant father; a purple-haired Edie McClurg as her spineless, capitulating Mom; and Stone's son Sean as her bemused younger brother. Shot in an exaggerated television style against Victor Kempster's strategically tacky sets, the sequence — complete with a horrifyingly inappropriate laugh track and closing credits — serves as a chilling, ironic, and highly effective critique of television's clichéd vision of the "happy nuclear family."

"I have a particular fear of tackling any subject matter that says 'television' in a 35mm format," explains Richardson. "When you watch a sitcom, there's something distinctly different in the quality and reproduction of color. To try to capture that 'sitcom look,' we shot in the Beta format with Ikegamis, and we set up in extremely static positions, motivated simply by the motion of the characters, and by traditional TV shots — masters, over-the-shoulders and singles. The angles you would get with a typical three-camera setup were the angles we chose. We didn't attempt to do anything beyond that, except for a couple of shots — one tracking shot that took Rodney to his second position; a graphic, high-quality 35mm black & white insert of the father fondling the daughter; and a couple of silky close-ups of Woody and Juliette as they look at each other lovingly."

Kempster's gaudy, eccentric production design heightened the sitcom effect by creating a bizarre separation between foreground and background elements. "If you walked onto that set with any type of mental disability, you would have been thrown into a seizure by the design of the wallpaper," Richardson jokes. "And the video just attacked it, which we hadn't really anticipated. That jarring illusion of separation was heightened even further when we transferred the video footage to film."

The cinematographer swallowed his professional pride yet again while shooting a "television documentary" segment in which Wayne Gale details Mickey and Mallory's murderous rampage. The sequence begins with Gale's introduction, a "roadside report" from Route 666. To simulate the sort of experimentation that might be found on a magazine-style television show such as *American Maniacs*, he recorded Downey's melodramatic intro in offspeed 35mm, shooting at 6 fps. Reprinted later at 24 fps, the footage retains the element of sync dialogue, but has a jittery quality that adds a foreboding edge to the reporter's spiel.

Richardson was pleased with the results, but found the limits of his good taste tested while creating the rest of Downey's segment, which combined the hardboiled kitsch of old-fashioned "true crime" documentaries (complete with a stilted voiceover and black & white blowups of "police file photos") with the raggedy look of "dramatizations" familiar to viewers of sensationalistic television shows such as *America's Most Wanted*. "If you find yourself tuning out creatively, you can always try shooting that type of material," Richardson says with a derisive chuckle. "It

Mickey takes aim at a short-order cook during the film's bloody opening sequence. In the finished picture, the filmmakers cut to a "bullet POV" shot which tracks the path of the lethal projectile.

Above: ***Tabloid TV reporter Wayne Gale (Robert Downey, Jr.) tries to convince Mickey that a live interview on Super Bowl Sunday might help him overtake Charles Manson in the networks' serial-killer sweepstakes. Note the trademark "Richardson halo" around Harrelson's head; the cinematographer says this technique serves as a kind of "spotlight" to draw attention to the characters.***
Right: ***Richardson's use of hard toplight lends drama to Mickey's gunpoint showdown with Jack Scagnetti.***

doesn't take a lot of ingenuity to reproduce that style of filmmaking. It's very over-the-top, and there was a lack of concern on our part for the filming of that stuff. While shooting that sequence, I really had to get rid of my desire to produce something with quality."

More palatable to Richardson were sequences in which rough-hewn techniques were blended with state-of-the-art images, such as the scene in which Mickey, thrown into prison for auto theft, improvises a mythical escape. Working in the prison corral, our inventive protagonist takes advantage of a sudden tornado by commandeering a horse and galloping off into a massive dust cloud. "That sequence was shot extensively in black & white 16mm, but the landscape imagery was 35," says Richardson. "The entrance of the tornado, as well as a cutaway to some rattlesnakes and a picturesque shot of Woody riding his horse across the frame, was all done on 35. Everything else was shot in 16mm using two cameras operated by [second-unit cinematographer] Phil Pfeiffer and myself. Phil and I shot almost all of

the action that occurred within the corral simultaneously. He would have to be hidden if I was in the handheld position picking up a secondary action with the actors.

"To simulate the effect of the twister, a small explosion was set off in the distance, and the tornado itself was added digitally by Pacific Data Images. While we were shooting, Matt Sweeney and his effects crew used jet engines to kick up a tremendous amount of dust, and one of the cameras was essentially buried in sand. The ultimate effect upon three magazines of film was the scratchy look that you see in the movie. To me, that look was outstandingly beautiful, but it was entirely accidental — the result of some fortuitous demons. Because we were switching stocks all the time, we were able to take advantage of it."

Mixing formats was just one method used by the filmmakers to lend the visuals emotional and psychological resonance. In order to convey the characters' interior thoughts and attitudes, Stone came up with the idea of literally "projecting" those thought patterns via plate footage that would appear in the background of certain scenes. This bold tactic greatly expands the film's cinematic syntax and infuses many scenes with a revealing visual subtext. The technique is introduced at the tail end of the diner slaughter, when Mickey and Mallory indulge in a romantic slow-dance. As they clinch and spin, the diner's lights fade out, revealing a process shot of fireworks in the skies of Paris.

"The initial drafts of the script included several process shots, but they were more intended to provide a 'travelogue' feel than a pyschological element," Richardson notes. "We ended up conceiving, principally due to Oliver, the idea that we would enter the characters' minds through those sequences.

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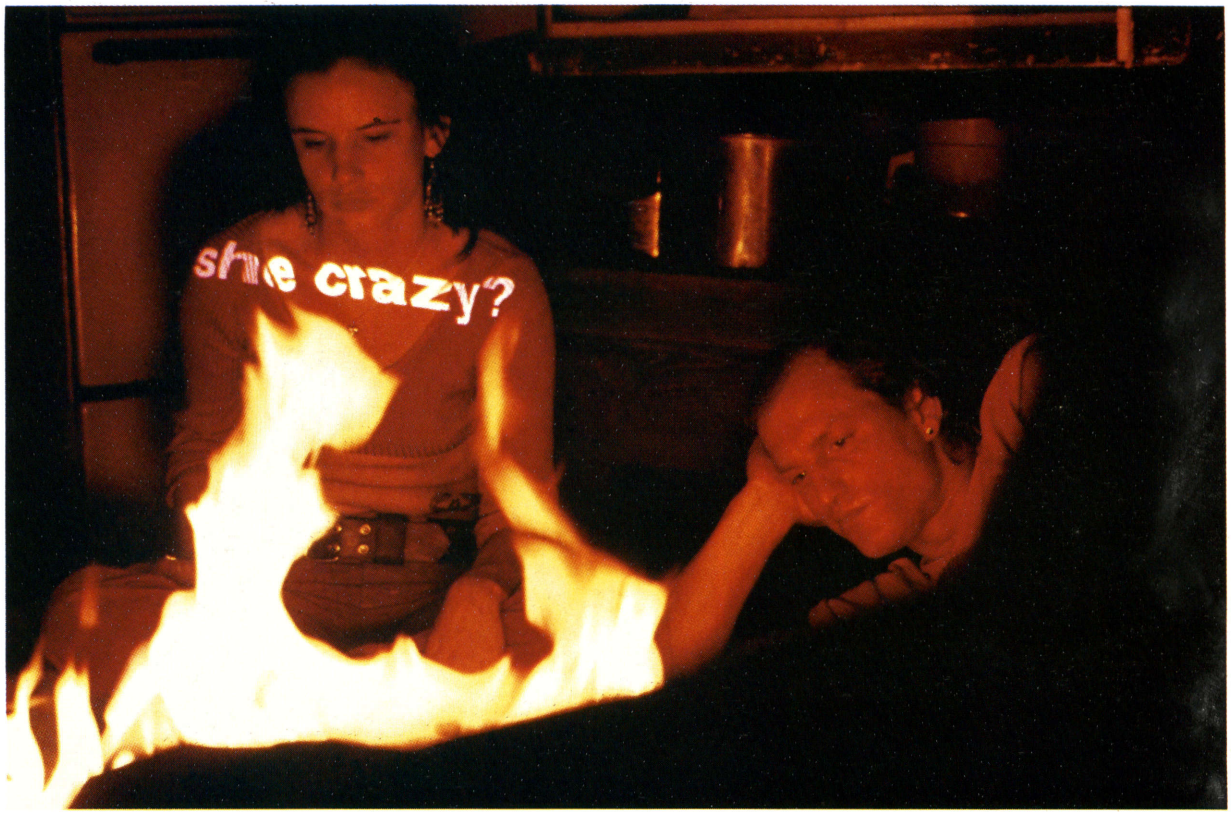


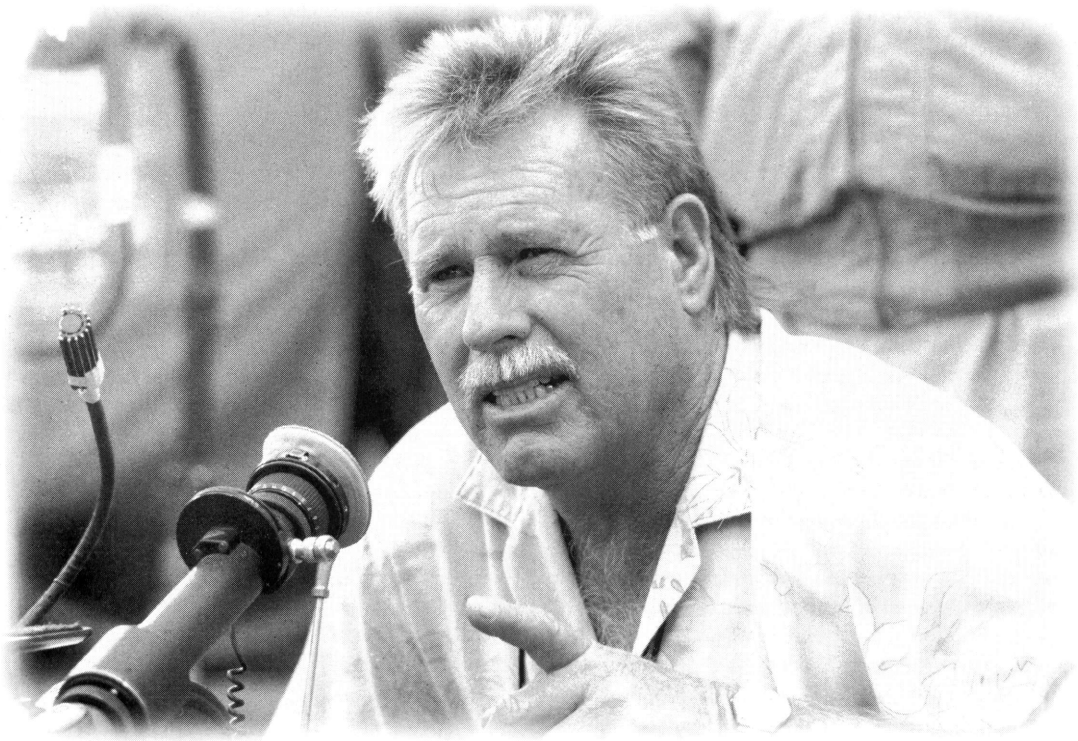
Projected phrases are used to add subtext to Mickey and Mallory's visit with the Indian. The fire provided most of the lighting for the scene.

In other words, their corporeal world does not necessarily reflect the mental world they are in. So in the diner dance, we placed them in Paris, with the exploding fireworks. That was tough to accomplish technically, because the diner was an actual location rather than a stage set. It was difficult to coordinate things logistically, and in my mind we never achieved the perfection we could have gotten on a set. We had to resort to front projection on the diner wall, whereas on a set we could have cut out a wall and used rear projection. We also could have had a larger screen and a more elaborate dimming system for better control over the lighting. But other than that it wasn't too difficult; we simply used a dimming gag with a corresponding spot-lighting system. The irises were open to give the characters two separate edgers that led them into black, and the camera just drifted off slightly to reveal the background process footage."

A different use of the background imagery occurs moments later, during the film's unique title sequence. To create the feel of Mickey and Mallory's physical and psychological "joyride," the filmmakers placed Woody Harrelson and Juliette Lewis in a car on a stage, and shot the actors' ebullient gestures and reactions against a kaleidoscopic collection of rear-screen plates which included desert landscapes, stock footage, and scenes from cheesy old science-fiction and cowboy movies. "Most of that sequence was shot on a Los Angeles stage prior to production," says Richardson. "The large rear-projection setup was provided by Hansard, and the plate material was collected in a number of ways. There was a two-week period prior to production when I went on the road to shoot landscapes, buildings, and particular locations that Oliver had pinpointed during our scouts. Along the way, I found other things, such as roadkills, interesting-looking telephone poles, and so on. Those pieces were shot in both 35 and 16, and they were combined with found footage from stock libraries. We used scenes from old movies and television shows, and also mixed in nature footage, such as daisies. Other stuff was taken from time-lapse stock libraries."

Richardson notes that he kept his camera aperture "wide open as much as possible" while shooting the driving scenes, because many of the plates were quite dark. "Not all of the values on the film were the same," he says. "Some things would be too dark to my taste, while other things were a little too bright."

This problem was alleviated a bit by the colorful, almost psychedelic lighting patterns Richardson used in the foreground on Harrelson and Lewis. "The fact that the rest of the lighting in those sequences varied wildly was what made the overall look acceptable. If a plate was weak, or if we didn't want the plate to be the element that your eye would be drawn to, we might focus on the foreground elements and play them up a bit. Woody and Juliette's acting was another



Roland Ozzie Smith, Director of Photography
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determining factor. I tried to oscillate between highlights and foregrounds with colors and brightness values that would be in direct friction to the plates in the background. That way, when the plates were weak, or even if it was a random choice, it would end up being to my benefit. I wasn't worried about being too bright, because I knew how far I could go in terms of overexposure."

"I may be absolutely wrong in my decisions, and there are many who will insist that I am," says Richardson. "But I can't battle with the critics."

Says editor Hank Corwin, "Working with the plates was like cutting movies within movies. The plates were cut beforehand, and then they'd shoot them. We figured we could pack in a lot more feeling with that approach; it was a more impressionistic way to tell the story. [Co-editor] Brian Berdan has worked with David Lynch, so he picked up the style really quickly."

The success of their initial rear-screen experiments led the filmmakers to expand the concept for other setpieces as well, such as Mickey and Mallory's turbulent stopover at a cheap motel. As Mickey lounges on the bed, flicking through TV channels with a remote control, disturbing images of his abusive childhood — as well as shots of Nazi atrocities, galloping horses and a howling coyote — play across a multi-paned window behind him. "That plate was designed after we realized the success of our original plates," Richardson notes. "Oliver decided that he wanted to go another step. The motel plate footage is not conceptually tied to the television screen, which clearly shows representations of Hollywood movies and nature shows. The window material reflects Mickey's interior state of mind. In a similar scene later on, when Scagnetti strangles a prostitute in a different motel, we projected police file photos of murder victims, but you have to look very closely to see them, because they were quite graphic and repulsive and we didn't want to show them too prominently."

Plate photography is also featured during Mickey and Mallory's visit to the wise Indian, who lives in a "hogan," a traditional, spherical Navaho dwelling constructed of logs and mud. As the Indian entertains them with humorous anecdotes and bits of philosophy, the two outlaws — ragged from the road and experiencing mushroom-induced hallucinations — drift off to sleep. Mickey's half-slumber is interrupted by vivid, nightmarish visions, and when he is jolted awake, he panics and shoots his host. Distraught by this accidental homicide, the pair attempt to flee into the night, but rush headlong into a field of rattlesnakes.

Richardson notes that the filmmakers shot most of the interior scenes involving the Indian on a stage, within a specially constructed hogan. A real hogan was used for exterior shots of Mickey and Mallory as they approach the structure, as well as shots of their hasty exit through the rattlesnakes. "Most of the interior footage was shot with either light coming through the top hole of the hogan or through the windows; the fireside scenes were lit mostly by fire," he says. "The daytime dialogue scenes were primarily lit with tungsten Pars; for the nighttime sequences, we went mostly with propane gas as our lighting source, because the characters were only a couple of feet away from the fire itself."

Projection plates were used several times during the sequence — to simulate the sky though the hogan's top hole; to create an ominous nighttime background of a howling wolf through the door; and to simulate several of Mickey's horrifying hallucinations, which include more images of his childhood and time-lapse footage of decaying fruit. "The projection screen determined my lighting values," Richardson explains. "Almost all of that material was shot at a 2.8 or slightly under 2.8. The lighting source in that particular situation was a fire with an additional bank of blondes through colored gels to get me to a higher level, because I couldn't get the fire to the height I needed to give me good values for the sequence."

In scenes where plates or different formats weren't used, Richardson relied primarily upon unusual lighting techniques to achieve a sense of disorientation or drama. Several key scenes, for example, are imbued with a sickly green hue to indicate the characters' instability. This green wash first occurs when Mallory, feeling spurned by her man, seduces a gas station attendant in a garage. The look is used in two other key sequences as well — in the first, Mickey and Mallory, poisoned with snake venom, attempt to track down an antidote at an enormous pharmacy called Drug Zone; in the second, which occurs at the film's climax, the outlaws take refuge in a tiled, bloodstained room during the prison riot. Although the looks in each scene are similar, Richardson notes that slightly different methods were employed.

"In the gas station sequence, the green hue was achieved by using gels on fluorescents, and by using KinoFlos with a type of fluorescent light that's used for lighting greenscreens in optical work," he reveals. "In that particular scene, there was a bit more blue in the green because we also used HMIs with green tones in them. We used this steel-blue green again at

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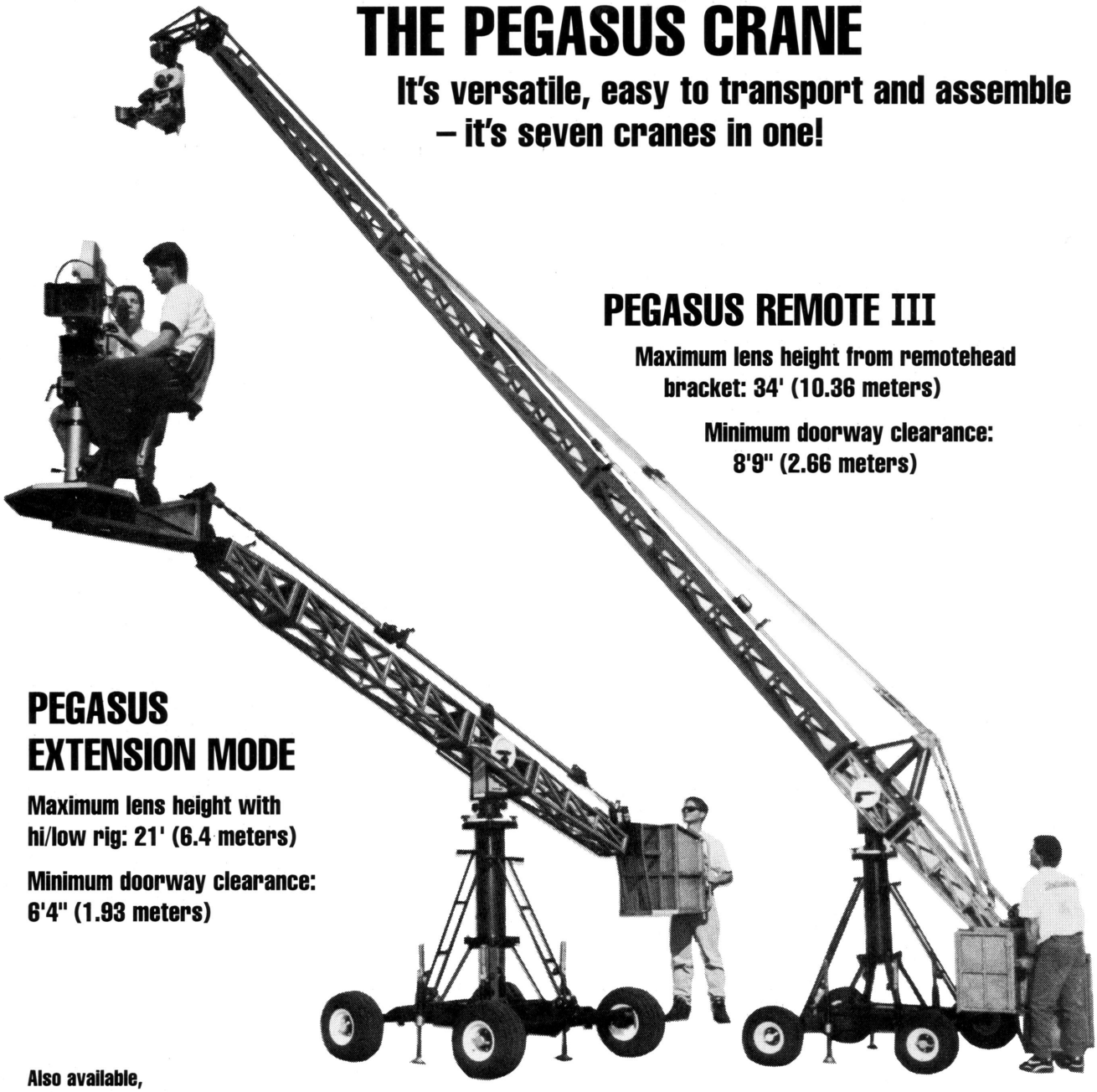

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the end of the prison sequence."

The Drug Zone interlude, however, is awash in a purer shade of green. "For that sequence, we spent a great deal of money — somewhere in the vicinity of $20,000 — to purchase between 2,000 and 3,000 green bulbs from General Electric. We were shooting 35mm, but coating it with a veneer of repugnant color. That color allowed the repugnant quality to take on a very heightened, lush element, which helped me find relief in shooting 35mm under fluorescents. Quite honestly, the use of the bulbs made things much easier for the electrical crew in the long run, because once we got everything hooked up, the supplementation of color was provided by simply using fluorescent units on the floor to fill in eyes."

"This picture points the finger at everybody; we all have this bug in us, and it's as old as man." — Oliver Stone

The final reel of *Natural Born Killers,* which takes place almost entirely within the prison, offers a show-stopping crescendo of seat-of-the-pants cinematography. Beginning with Scagnetti's introduction to Warden McCluskey (which supposedly takes place one year after the supercop's spectacular arrest of Mickey and Mallory), the film's last act features a wide variety of looks.

"Once we reached the prison, I really became a 'method cinematographer,'" Richardson says. "We were trying for a paranoid feel, which is not extraordinary difficult to achieve when you're in the middle of a real prison! Initially, we went to a very conservative approach in the prison to settle the film back down after the madness of the 'road movie.' We still attempted to keep the punctured, expressionistic element with quick shots of Tommy Lee's tongue, the guards' keys, and some black & white tracking shots. We wanted to keep that style alive, just on a much more subdued level; later on, during the riots, we went into pure madness, mirroring Oliver's staging. For the first scene at the prison, we used a Steadicam to get a backwards tracking shot of Scagnetti and McClusky. We shot on 93 and 48, depending upon whether the characters were walking inside or outside. I felt that we should strengthen the grain element in those shots, and thought about using 16mm. But the quality of 16mm color stock has become so good at this point that it's impossible to get that kind of grain. Instead, we created a granular look in post for the first set of walk-and-talks, all the way up until McClusky confronts some prisoners in the dining room, where we went with straight 35mm. We did use 16mm for shots intended to add elements of paranoia — mainly the eyes and faces of frightening-looking inmates."

Stone soon pushed Richardson's "method" technique to its maximum for a scene in which Mallory, after spotting Scagnetti peering through the window in her cell door, charges headfirst into the glass, knocking herself unconscious. The same fate nearly befell Richardson and second-unit cinematographer Phil Pfeiffer. "Oliver wanted Mallory's point of view as she ran toward the door and smashed her head into it," Richardson recalls. "He wanted the actual impact. I was using a 14mm lens, handheld, and I had strapped a piece of foam rubber onto the camera so I could get run up really close to the door. Once I felt the foam rubber absorbing the shock, I would stop my forward motion, because at that point I was only six inches from the door. But Oliver felt that he wasn't getting the actual hit, that I was pulling back at the last second — which was absolutely true! I was extremely reluctant to take that next step, but Oliver took me off to the side, chained me up and whipped me a few times to make me comply." He chuckles ruefully before adding the inevitable punchline. "When I went back to do the shot again, I wound up breaking a finger, which put me out of commission. Then Phil gave it a try, and he cut his eye open. He needed four stitches, and that was the end of the game, because we didn't have a third-string quarterback. But Oliver got his shot."

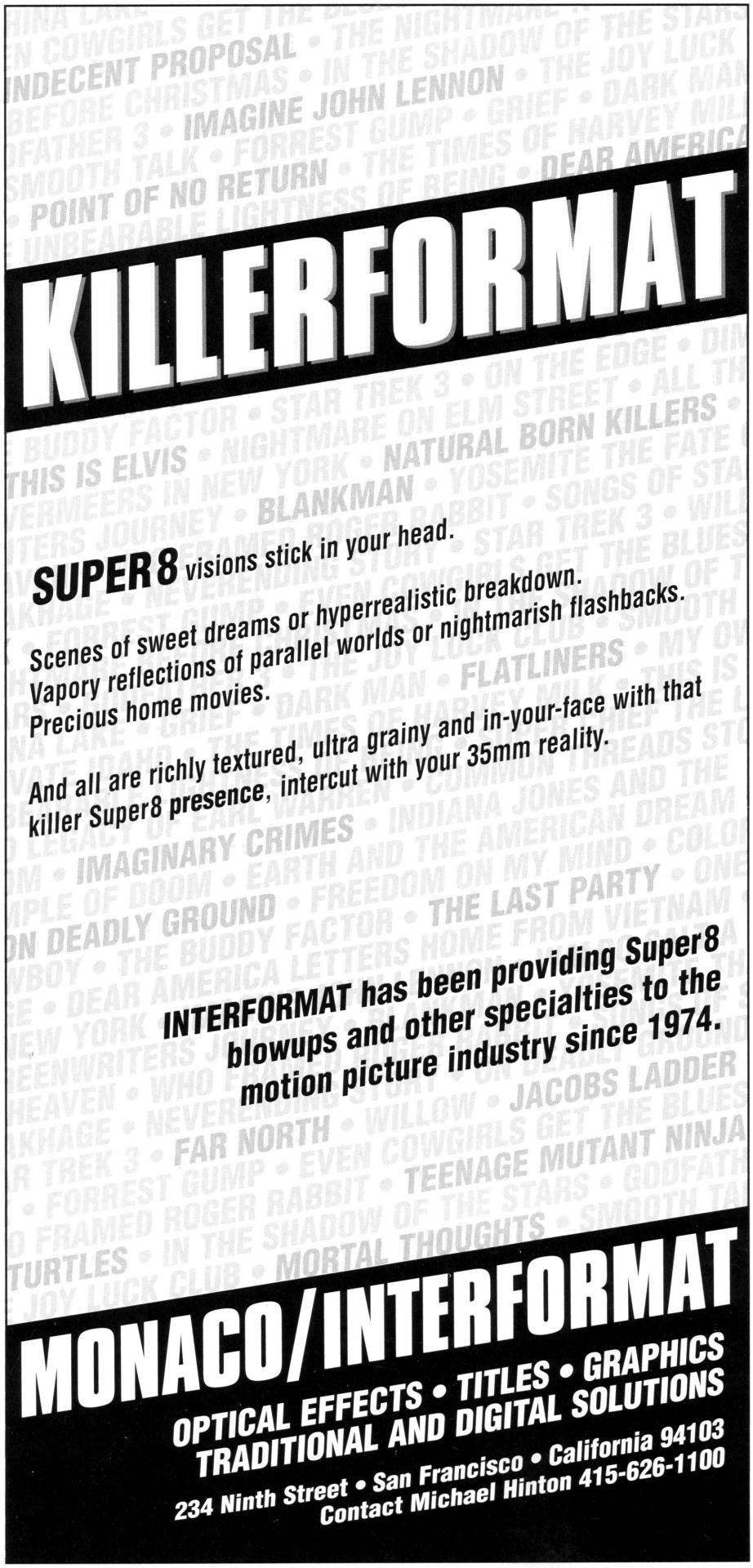
Another eye-catching shot reveals a solitary Mickey in his cell, writing a letter to Mallory. The light in the cell is provided by an extremely hot ray of "sunshine" pouring through a single window. "In that scene we were using a beam projector," Richardson says. "It's an older light that Barbara Ling, the production designer on *The Doors,* turned me on to. One of our desires on that film was to find fixtures that were from that period; we didn't want to use contemporary lighting styles and equipment. The beam projector, along with Pars, became the easiest way to get the brightest elements in tungsten. The beam projector consists of 5K and 10K bulbs placed in front of a Bausch and Lomb mirror, with no fresnel. It creates a very sharp beam, but it's not as bright as a Xenon. Ian Kincaid, my gaffer on *The Doors,* developed a series of those fixtures, as has Ray Peschke, my gaffer on *NBK.* We used one of Ray's lights on this show."

As in the earlier diner sequence, Richardson employed a dimmer system while filming a shot of McClusky and Scagnetti observing a conversation between Mickey and Wayne Gale from behind a pane of two-way glass. As the camera moves in on the opaque window, McClusky and Scagnetti magically materialize beyond the pane. "That's a technique we began playing with

in *Talk Radio*," says Richardson. "You are looking at a two-way mirror which is mostly reflective. We had dimming gags in the space behind the mirror. You have to raise the inner light level to a certain height before you can penetrate the mirror visually. As we pushed forward, I lowered the existing light level in the room I was in and raised it to a corresponding level on the other side of the glass. I had to raise the light level in the other room to quite a high level so we could see beyond the glass, which absorbs a certain amount of light. That shot was really done by eye."

Dimmers were also used for Mickey's prime-time interview with Gale. This time, the system helped to provide color shifts as actors Woody Harrelson and Robert Downey, Jr. engaged in their highly improvisational confrontation. "I was operating, but Ray Peschke was attached to me via intercom," Richardson relates. "The two of us would whisper to each other and make the color changes based upon each succeeding take. Ray controlled the lights with dimmers as I moved around. If he felt we needed a sudden change, he would pull; you have to have a lot of faith in the man who's behind your lights, and Ray did a brilliant job. Robert and Woody kept changing their dialogue and the rhythms of their line readings; as a result, it was a bit difficult for us to maintain consistency. We would choose our color — either red, white or blue — as our major element according to the dialogue. It was a very instinctual process, but we finally locked into a pattern after a number of takes. Once we were locked in, we would attempt to repeat the cues as closely as possible so we could match the footage later in editing."

The same color scheme is used for a parallel sequence in which Scagnetti attempts to seduce Mallory in her cell. Richardson combined the shifting colors with his trademark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lighting style, a mixture of hard toplight and backlight. "We used hard toplight and a number of tones," he says. "We used red, white and blue again, as well as a slight amber shade. We felt that the oscillating tones were capturing their feverish mindstates; as the scene plays, there's a sense that they're in a precarious place. The trepidation the viewer feels mirrors Mallory's state of mind as she sits there with Sizemore. We also kept the camera moving to put the audience on edge.

"The hard toplight says something as they start to burn and glow; the look is harsh and contrasty, and the backgrounds start to fall off because so much of your attention is being drawn to the foreground. Not being able to look at something for a long period of time does make the viewer feel a bit ill at ease."

Asked about his pioneering use of these glowing halos of light, Richardson demurs a bit. "I have no idea what led me to adopt this approach; I've been moving in that direction for awhile. Personally, I find it a visually engaging look, so I've always been attracted to it. It tends to draw the eye to the characters; that was the motivation on previous pictures, with the characters of Oswald and Jim Morrison. It's really no different than putting a spotlight on somebody, but a spotlight isn't conducive to what we generally consider to be proper placement of light on a face. Instead, my light comes very hard from above. I use different lighting positions to achieve different types of glows — slightly behind the head and directly down, or at eye level and down, hidden behind a head or a body. In the case of Oswald in his jail cell, the light was parallel with his body. But the glow is not as dependent upon positioning as it is upon the lighting level. Generally, I work at a stop between 2.8 and 4. On this particular film, the zoom was used at times for convenience, and that lens started at a 2.8. With the primes, I'd generally be dealing with a 2, and I would usually go a stop down. I don't necessarily set up my lighting to suit the lens, though; when I'm hired to shoot a picture, I usually look to the locations to help determine my lighting scheme.

"It's very hard for me to give an intellectual reason for why this technique works for me," he concludes. "A lot of times it's simply an emotional reaction or an aesthetic approach that feels appropriate. I may be absolutely wrong in my decisions, and there are many who will insist that I am, but I can't battle with the critics. It's just something that feels right to me."

Battling with the critics, of course, has become standard practice for Stone, who insists that he takes no particular relish in defending his artistic endeavors. Like many of his previous films, *Natural Born Killers* has provided plenty of grist for America's op-ed pages, where armchair auteurs have taken the director to task for his stylized depiction of violence. As always, however, the outspoken Stone offers a spirited defense of his motives. "If you censor the concept of violence, you are doing society a disservice," he maintains. "The theme of *Natural Born Killers* is that violence is all around around us; it's in nature, and it's in every one of us, and we all have to acknowledge it and come to grips with it. I think this film deals with the *idea* of violence. It disturbs people, it roils their minds, and it makes them think about themselves and their reactions to the violence. By taking a 'higher moral road' — which is easy when you're in civilian life and you're enjoying the benefits of an advanced technological society — you're under the illusion that you don't have to deal with it, and that's wrong. There are those who are all for 'three strikes you're out' and 'throw away the key,' but that doesn't solve the problem of crime or the problems of society."

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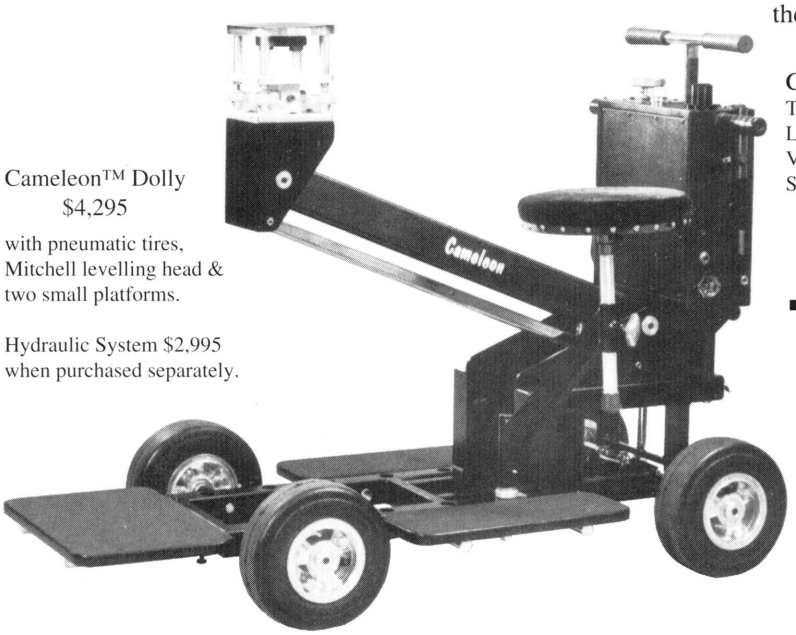

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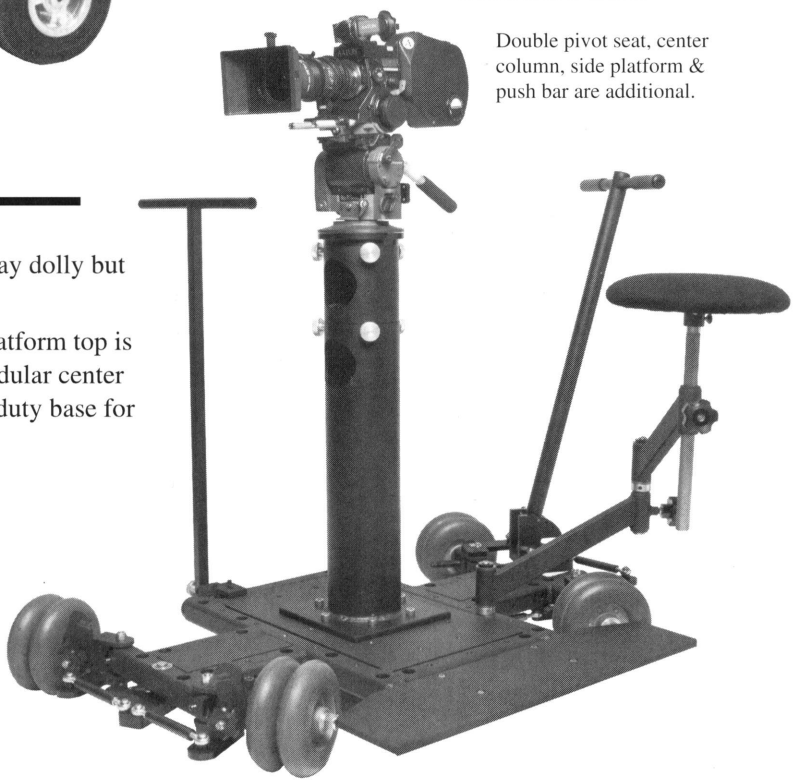

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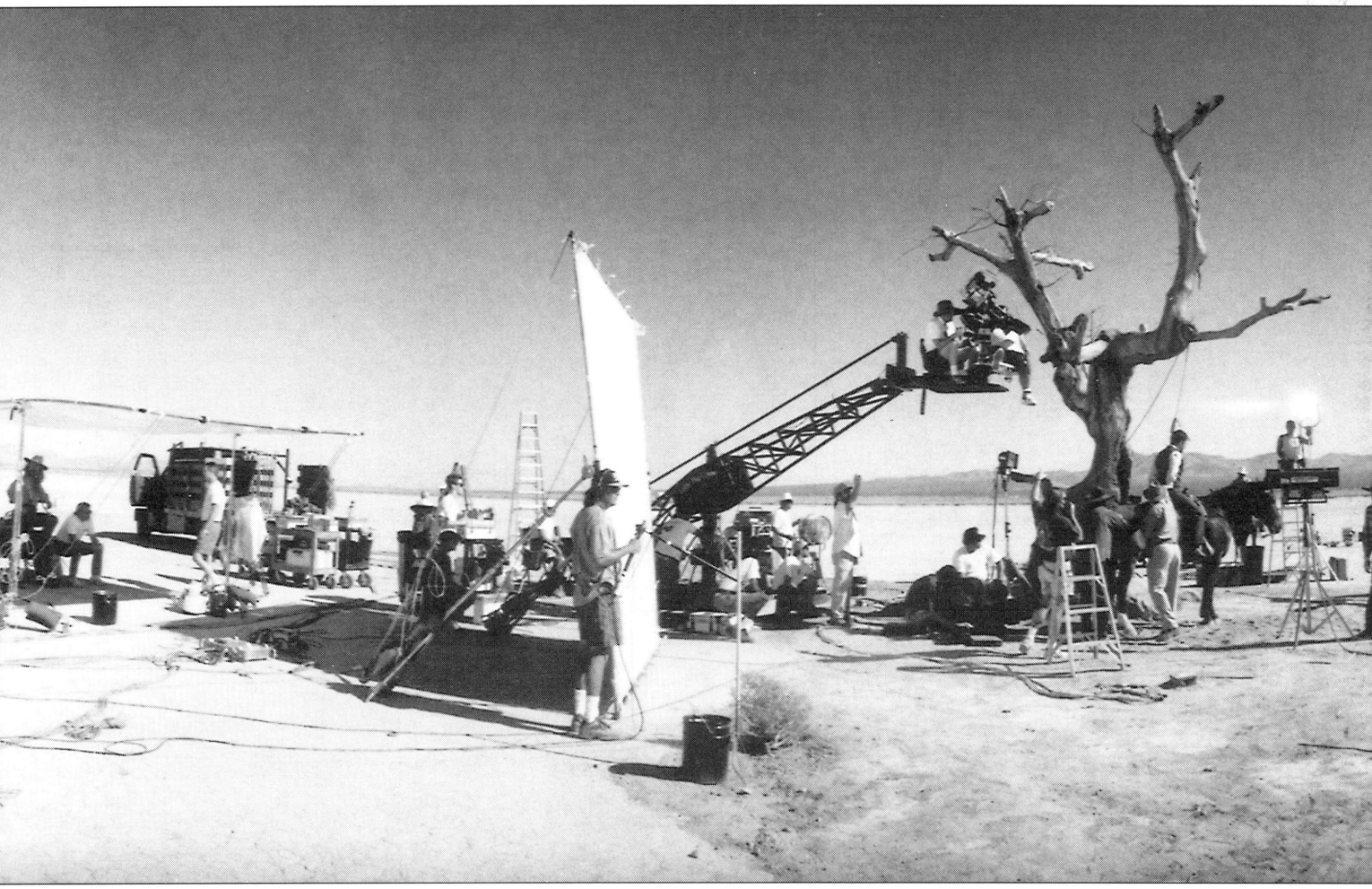


In 1959, when Westerns accounted for 40 percent of the evening prime-time network schedules, you could watch Westerns 28 hours a week. *Gunsmoke*, *Bonanza*, *The Rifleman*, *Laramie*, *The Rebel* and similar programs featured good guys who drew their guns faster, shot straighter and hit harder than the villains. Heroes wore white hats and bad guys dressed in black, and the series had a generalized ethic about strong people who tamed the last frontier and brought justice to the West.

Maverick ran against the grain of Western folklore. In the series, which ran from 1957 through 1961, James Garner portrayed a fast-talking gambler who preferred guile to guns — he'd rather charm you than shoot you. And like so many TV heroes of those days, Maverick came back. This summer he made it to the big screen, with Mel Gibson in the featured role and Jody Foster co-starring as his love interest. Garner, some 33 years after filming the last episode of *Maverick*, plays the gambler's father. The rest of the main cast includes Graham Greene, James Coburn, Alfred Molina, Margot Kidder and Clint Black. The Warner Bros. release was directed by Richard Donner and photographed by Vilmos Zsigmond, ASC, and marked the first time their careers intersected.

Zsigmond had other things on his mind when Maverick was in vogue. In 1956, he and Laszlo Kovacs, ASC, were studying filmmaking in Budapest. A spontaneous uprising against the communist regime erupted on the streets of Budapest. The two students took to the streets armed with a camera. When the Russian army entered the city en masse, Zsigmond and Kovacs filmed futile and heroic acts, such as factory workers trying to defeat tanks with bottles of gasoline.

Only weeks after the revolt was crushed, they decided it was best to leave the country. Zsigmond and Kovacs wanted the outside world to see their film. The pair walked for miles through the woods, dragging 40,000 feet of film stuffed into sacks. They avoided Russian army patrols and Hungarian border guards. It was a dangerous game. When the Russians got too close, Zsigmond and Kovacs hid the film and submitted to a search, pretending that they were local farmers. By the time they reached Vienna, the Hungarian revolt was old news. They sold their film for the price of having it processed, and decided to follow their dreams to America.

Zsigmond's recent films,

Photos by Andrew Cooper, courtesy of Warner Bros.

Zsigmond Shows Strong Hand On *Maverick*

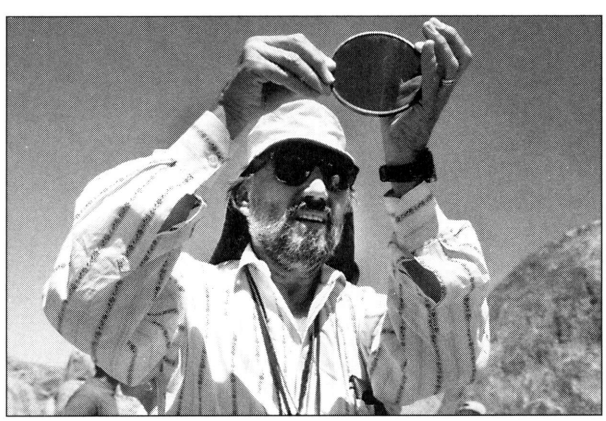
Vilmos Zsigmond, ASC heads west once again to shoot big-screen remake of popular television series.

by Bob Fisher

Produced by Bruce Davey
and Richard Donner
Directed by Richard Donner
Director of photography,
Vilmos Zsigmond, ASC

such as *Sliver*, *Intersection* and *The Bonfire of the Vanities*, have explored contemporary, and rather dark, themes. However, the cinematographer isn't a stranger to the Western genre. In 1971, Zsigmond photographed *McCabe and Mrs. Miller*, and in 1979-80, he filmed *Heaven's Gate*. In fact, Zsigmond's first Hollywood feature, *The Hired Hand*, was a Western. His subsequent eclectic mix of credits include *Deliverance*, *The Long Goodbye*, *Scarecrow*, *Cinderella Liberty*, *Sugarland Express*, *The Rose* and *The Witches of Eastwick*, and, most recently, *The Crossing Guard*. He won an Oscar for *Close Encounters of the Third Kind*, and earned nominations for *The Deer Hunter* (which won a British Academy Award) and *The River*. Zsigmond also won an Emmy for *Stalin*, an HBO movie.

The big-screen version of *Maverick* has all the elements one would expect from a Western, all hinging on a $1 million winner-take-all poker game. As a build-up to the game, Maverick gathers his stake by collecting old debts.

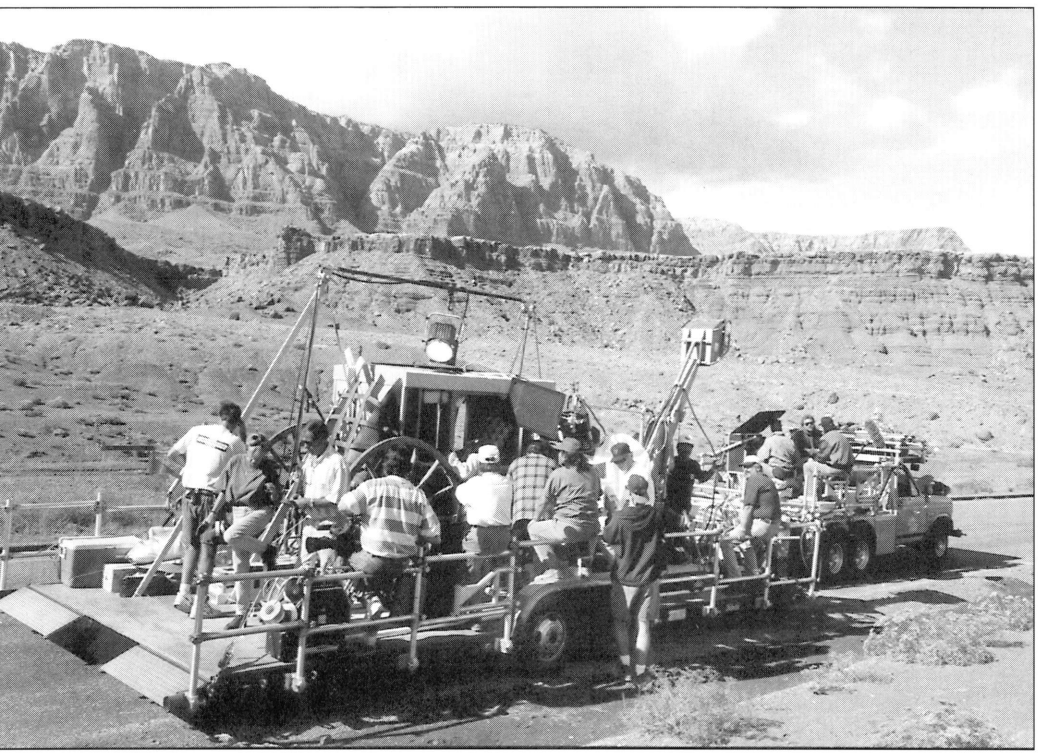


There are some preliminary card games with other gamblers — a kind of playoff — before the finalists compete in the main event, which takes place on a riverboat.

"All of the Western settings are authentic," says Zsigmond. "Tom Sanders is a terrific production designer. We discussed everything — how to recreate the look and feel of the 1870s on the Western frontier, what kind of practical lights were needed, and where they should be. You dream about working with people like Tom."

The streets in *Maverick* are sometimes muddy and other times dusty, as few frontier towns sported sidewalks, and the film's makeshift look differs from the comparative

Large photo: *Shooting Maverick's near-demise on a desert plain.* Below: *Zsigmond examines a filter.*



Above: ***The crew trundles to a location.***
Right: ***Capturing the action from atop a moving stagecoach.***
Opposite page: ***Mel Gibson and Jodie Foster outfox a group of seasoned gamblers.***

poshness of the saloons where Garner did his gambling on TV. Zsigmond also emulated the look of faded photographs, which, he points out, form our perception of the Western frontier, and gave a subtle sepia overtone to the film.

"It is just a slightly warm look," he explains, "which we created in the lab (at Technicolor) with help from John Bickford and Bob Kaiser.

"Night scenes are a little colder. We used some blue light. We mixed color temperatures at dusk," a combination of pale blue moonlight and warm tones emanating from candles, lanterns and torches.

Zsigmond spent most of his four weeks of preproduction time visiting locations and talking with Sanders. The first big decision was to shoot in anamorphic format (2.35:1 aspect ratio). "It's really not my favorite format, but there was no other way to capture the scope this picture needs," says Zsigmond.

The wide-screen format shows off its advantages when Zsigmond's camera is looking down from the top of a high hill overlooking a verdant valley. The sky is deep blue, and the foliage is a thousand shades of green. Deep in the background are stunning red rock formations. A frontier shantytown, designed by Sanders, sits in the mid-foreground by a river, giving the audience a feeling for the vastness of the frontier and the isolation of the people who tamed it. The horizon goes on forever, and there's not another town in sight.

The movie isn't just beauty shots, however. Breathtaking action sequences include a runaway stagecoach scene, in which Maverick reluctantly climbs out of a window and works his way onto the roof of the coach, then, after some hesitation, leaps onto a horse's back and slowly edges his way to the front of the team. And of course the horses are racing toward the edge of a cliff with a 1,000-foot precipice overlooking the Colorado river. "The second unit did a wonderful job of designing this sequence, and shooting it with doubles [for Gibson and Foster]," says Zsigmond. "But, then we shot again with the first unit with Mel doing 90 percent of the stunts himself."

A four-minute Steadicam sequence, painstakingly rehearsed and precisely executed, highlights the climactic riverboat card game. A master shot establishes that Garner is walking around the hall, and then the Steadicam operator shows the audience the scene through Garner's eyes as he makes 360-degree circles around all three tables. At one point he stops to peer over someone's shoulder, and the actor holds his cards in front of the lens. The subjective point of view communicates tension and suspense to the audience.

While this scene was being filmed, Zsigmond controlled

some 30 lamps with five electricians and a half-dozen dimmers. Lights went on and off in concert with the position of the cameras. Backlight from one angle became fill from another point of view. In the finished product, the light looks natural, and somehow there are no camera shadows.

Zsigmond says that Donner likes using multiple cameras, partially for coverage but mostly to capture spontaneous reactions. Around 95 percent of *Maverick* was shot with two Panaflex Platinum cameras aimed in the same direction. Sometimes a third camera covered the action from an opposing angle, often capturing an actor's reactions to the main substance of the scene.

Faces, to Zsigmond "the most important part of any film," were especially valuable in this picture because much of the humor is based on dialogue. The camera draws the audience into the words and shows the reactions in the eyes and facial expressions of the actors. Zsigmond had unrestrained creative latitude in lighting. "I could make it as dark as it needed to be," he says, "but Donner wanted to see details in faces.

"I like eyelights, but I don't use Obies," the cinematographer continues. "They don't work for me. I prefer an Inky, or another small unit, just over or under the lens. It puts a glint in the eye. That's important, even on exteriors. Sometimes a 12K HMI becomes the 'eyelight.'"

Zsigmond believes today's audiences are visually literate — that they can sense if the light in a scene isn't true to reality, and that they know that window light looks different than the glow of a kerosene lantern. According to Sanders' research, in the gambling halls, most of the light at night came from sources above the tables. On the riverboat, a large kerosene chandelier hung above each table.

Most contemporary Westerns have noticeably darker interiors than *Maverick*. Zsigmond points out that the intensity of light is relative. "If you light a candle in a dark room, you have to shield your eyes from the brightness," he says. "That's because your eyes adjust to relative darkness."

Zsigmond also points out that perception is more important than reality. For the three-week shoot on the riverboat, the visual effects staff rigged the chandeliers to sway slightly to suggest that the boat was moving through the water. "My operator, Ray De La Motte, also moved the camera, just a little, up and down, and from

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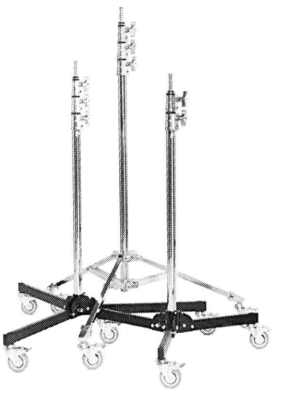

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Occasionally, one of the cameras was operated at 96 frames per second to slow down the action and extend the dramatic impact of a critical part of a scene.

"It has to feel natural," he explains. During a scene in which Maverick suspects someone of cheating by dealing from the bottom of the deck, the high frame rate slows the action down enough to exaggerate the sleight of hand, and serves to demonstrate Maverick's unusually sharp senses.

For a shoot-out in which several characters draw their guns simultaneously, the slow-motion effect of the high-speed photography intensifies the dramatic impact by showing the timing of the action. It allows the audience to see a little more clearly, and it also makes them wait a few seconds longer for the results. In these instances, Zsigmond had a prime lens on the camera, and generally set at stop T-2.5. Most of the time, he used 4:1 and 11:1 Panavision zoom lenses (Cooke retrofits).

"The zooms are much slower," he says. "I was generally working at stop T-5.6, and that means we used more light." But he was also pulling deep stops, resulting in natural-looking depth-of-field. Zsigmond mainly used the zoom lenses for conve-

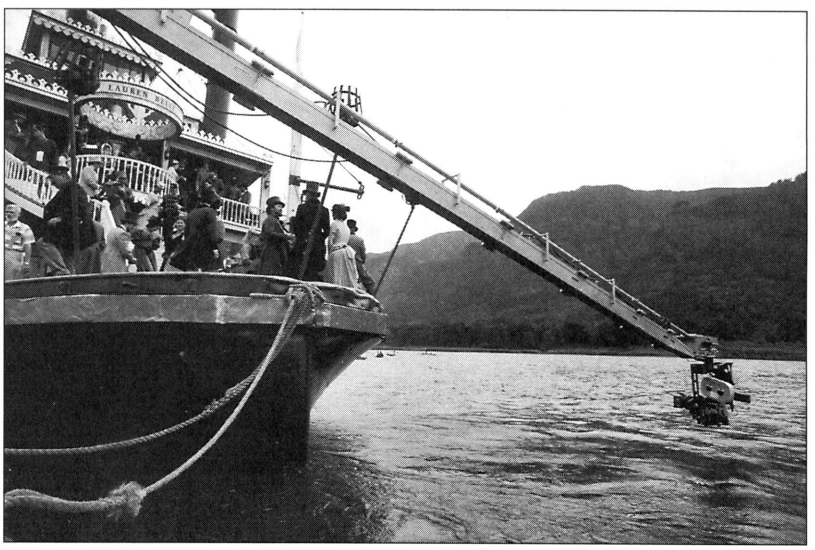
Above: ***A scenic view of a riverside dock.*** **Right:** ***A crane is used to record an encounter aboard the "floating casino."***

side-to-side," he says. "It was a subliminal effect. You can't see the movement if you look for it. But you can certainly feel it."

Zsigmond wanted to shoot the night interiors in natural light with high-speed lenses. But Donner likes active cameras, always moving, going from wide shots to tight close-ups, and using the zoom for variable focus. Zsigmond shot tests with the Eastman EXR 5296 film, in candle and lantern light. The film is rated for an exposure index of 500 in 3200 K tungsten light. Even squeezing an extra stop of latitude out of the film, the ambience of natural light wasn't sufficient.

"I used real lanterns in front of the lens, around four to six feet away from the camera," he says. "You can see and feel the flame. We used electric lamps in the background, and gels to match the color of light from the lanterns."

Zsigmond routinely pre-flashed the film. "Just a little," he says, like someone describing a recipe for a gourmet meal. Only experience can say exactly how much "a little" is — an understanding of how different emulsions will react to such manipulations. Zsigmond explains that pre-flashing compresses the range of contrast slightly, and it has the effect of making the film act as though it is "faster," or more sensitive to light. Flashing brings out the details in the shadows.



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James Garner is held up by old pal James Coburn. The "moonlight" was created through the use of three 12K HMIs placed atop a crane — one created the shafts of light, and the other two bathed the background in soft moonlight. Hidden flickering lights created a campfire effect, and the creek served to reflect the moonlight.

nient and quick shifting of focal lengths. It kept the pace of photography more aggressive without imposing limitations on sizing composition.

Donner sometimes asked Zsigmond to gently slide into a zoom on lateral tracking shots. The visual impact is similar to that of a diagonal dolly shot, which was physically impossible in some situations.

Zsigmond chose the older zooms because the images they capture are a little softer than the newer Primo zooms. "It doesn't make sense to use a faster lens and then use diffusion to soften the look," he says. "We also used a lot of Steadicam shots, and it was a lot easier for the operator to use the lighter 'C' series lenses. The quality of the older zooms matched the quality of the 'C' lenses."

The third camera was used in critical scenes, including the final poker game. "The actors were doing a lot of ad-libbing with body language and facial expressions, and Dick wanted to capture spontaneous reactions that are difficult to repeat," he says. "Sometimes, we had both medium and close-up lenses on Mel at the same time."

Zsigmond used big units, including 20K tungstens and 12K HMIs. If he was shooting with a prime lens at T-2, he used diffusion to knock the level of keylight down to 12 footcandles. But at T-4, he needed four times as much light, and at T-5.6, 100 footcandles of keylight was the norm.

"You have to re-create the same available light look in all of these situations," he says. "That's why many cameramen like using fast lenses and fast films. That allows them to light by eye using small units. We had to re-create reality by diffusing the light of the big units and by other methods. It really makes you respect what cinematographers were able to accomplish before they had fast films and fast lenses."

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Sigurjon "Joni" Sighvatsson is co-founder and co-chair of Propaganda Films. The company has produced some 500 music videos, and has earned more than 30 MTV awards. Propaganda is also the largest producer of television commercials in the United States and has produced acclaimed TV programs and feature films such as, "Wild at Heart," "Red Rock West," "Kalifornia," "Twin Peaks" and "Tales of the City". Sighvatsson received the 1993 Eastman Kodak Award from the Music Video Producers Association.

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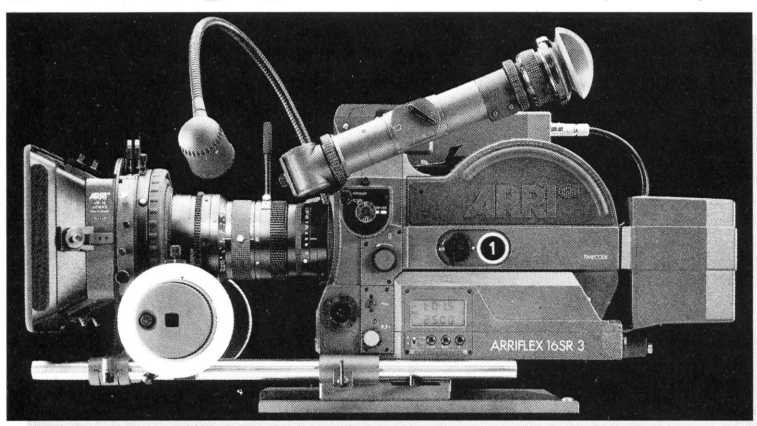

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One of the hidden advantages of shooting in anamorphic, Zsigmond says, is that it forces the cinematographer to concentrate more on composition. "You have to think about filling up the frame. You don't have to get in too tight to do close-ups of faces. With the 1.85:1 aspect ratio, by the time you compose a close-up, there isn't space for anything but the face."

Zsigmond adds that it's a natural inclination when shooting in 1.85:1 to start a scene with an establishing shot and then to cut to a close-up. When shooting in anamorphic format, the two shots can be combined into one.

"With a choreographed, longer moving shot, there is time for the eye to wander around the frame," he says. "You can play the scene longer, which gives you an opportunity to pull the audience deeper into the film. Every time you cut, you are basically reminding the audience that it's a movie."

Zsigmond believes that every film ultimately defines its own look and takes on a life of its own. Part of that look is defined during photography, and the rest during editing.

In anamorphic format, Zsigmond explains, a 30, 40 or 50mm lens is considered wide-angle coverage. A side benefit of lighting for depth of field on wide-angle shots is that it allowed him to come right in on a close-up with a zoom lens without stopping to re-light. Sometimes both shots were done at the same time.

Locations included the High Sierras near Lone Pine, Yosemite, Lake Powell in Arizona, and the Columbia River in Oregon. The riverboat interior was on a soundstage at Warner Bros. in Burbank. Other sets, including the interior of the Crystal Palace gambling hall, were built at practical locations in Arizona.

"That enabled us to shoot interiors and exteriors at the Crystal Palace at the same time," says Zsigmond. "We shot

at dusk almost every night. It was quite romantic-looking when we combined warm candles and lanterns with the moonlight softening the edges of the old Western town."

A typically beautiful night exterior near the end of the film was filmed in the woods, a campfire providing a source of warm light. Smoke rises from the fire, a creek flows in the foreground, and moonlight filters through the trees. "It's like being in a cathedral," he says.

Zsigmond often gave nature a helping hand. There were a number of desert scenes in which he and Donner wanted the audience to feel the dryness and heat. In the opening shot of the film, for example, Maverick, in silhouette, appears to meet his fate with his neck in a noose. Zsigmond enhanced the natural distortion of rising heat waves with heaters and a longer lens, lending the desert scene a sense of otherworldly doom.

All of the daylight exteriors were captured on the Eastman 5293 film, a 200-speed film designed for tungsten light. "I don't want to mix a lot of different film types," he says, "because that slows your crew down. Sometimes we rated it as a 400-speed film pushing one stop in the lab. It gave us an extra stop without increasing grain. I also think it is more saturated, and we wanted to record deep colors.

"It was interesting working with Donner," he says. "We had very good communications and discussions, including one on how to compose close-ups in anamorphic. He wanted more chin and less head, but personally, I don't like the eye being so close to the frame line. I'd rather see them closer to the middle of the frame. That is what makes this a collaborative process. Everyone has an opinion, but in the end it is always the director's film."

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Entrusted With *Guarding Tess*

Cinematographer Brian Reynolds reflects upon his first theatrical feature.

by Bob Fisher

In Hollywood, a cinematographer making the jump from episodic TV to theatrical features is about as common as a full solar eclipse. That's not something taught at AFI, USC, UCLA or other film schools, but that's the way it is.

Brian J. Reynolds bent that seemingly inflexible paradigm when he filmed his first feature, *Guarding Tess*, a dramatic comedy starring Shirley MacLaine and Nicolas Cage. Reynolds' previous fiction film experience at the time consisted mainly of two contemporary TV dramas, *Sisters* and *Civil Wars*.

The cinematographer's career change was set in motion when *Tess's* writer and director, Hugh Wilson, channel surfing during a commercial break of a football game, stopped on an episode of *Civil Wars*. The images grabbed his attention, and the next day, Wilson tracked Reynolds down on the stage at Twentieth Century-Fox. Without even asking for a reel, Wilson arranged a meeting between Reynolds and producers Ned Tanen and Nancy Graham Tanen. Then he offered Reynolds the job.

For Reynolds, it was another step in a long journey that started in Manhattan Beach, California, where both of his parents worked in the aerospace industry. "I always wanted to be a cameraman," he says. "I don't remember where I got that idea. But I know that I never wanted to do anything else. That was my dream."

By the time he was eight, Reynolds owned a Brownie 8mm movie camera, and he used it to make small films. A high school friend got him interested in still photography, and soon, Reynolds was taking pictures for the school newspaper and yearbook.

He also filmed movies of football games every Friday night. He was allowed to take the school's Bolex camera home during the week, and that's when he shot his first 16mm films. Reynolds earned an honorable mention in the Kodak Teenage Movie competition for a film which combined images with a Cat Stevens song, but narrative films were his specialty.

Photos by Kerry Hayes, courtesy of TriStar Pictures

"*The Man From U.N.C.L.E.* was a big hit on TV," he says. "I saved enough money to purchase a Beaulieu Super 8mm camera, and got some of my friends interested in making short films. Different people would make up the scripts and play the parts, but I always shot and edited the film."

After graduation, Reynolds worked as a still photographer for a small studio for several years, taking pictures of inanimate objects for catalogs. He was working in the camera department at a retail store when a friend told him that Mattel was looking for a photographer to shoot pictures of toys for their catalogs.

"I didn't have a portfolio, so I assigned myself to create one," he says, "and I got the job. Two of us opened a studio. It was a great education. I was working with terrific art directors at Mattel who taught me how to design images. I learned to ask myself where I wanted to direct the eyes of the audience when they looked at a picture."

Reynolds honed his craft in the crucible of trial and error. He started shooting video storyboards to test concepts for TV commercials produced by an ad agency. After a while, the marketing people at Mattel asked Reynolds to shoot the spots himself. That led to an opportunity to shoot and edit a series of spots filmed around the world for Hansen's, a soft drink manufacturer.

"We went to Sri Lanka, Bangkok, London, Italy, Mexico, the Arctic Circle, everywhere," he says. "It was just me and an assistant cameraman. We picked up local crews. They were thrilled. That's when I started to appreciate how privileged we are to work in this business."

Reynolds says that experience began shaping his perspective in ways that paid big dividends when he started shooting TV series. "I learned that what really matters is your ability to

put the money that the producer is investing on the screen," he says. "Shooting on locations with relatively small budgets forced me to think about developing a minimalist approach to lighting. There's always a faster and less expensive way to get a better shot."

Reynolds filmed numerous commercials after that, including a spot for blue jeans with director Sidney Galanty. It resulted in an opportunity to shoot the first Jane Fonda workout videos with Galanty. ("They wanted a film look," Reynolds recalls.) That project got Reynolds into the International Photographers Guild, which opened the door for his first studio film, *The Danger Team*, a pilot for Lorimar Television featuring Claymation characters.

The pilot didn't take root, but Reynolds' work caught the eye of director Robert Butler, who was making plans to produce *Sisters*, and Reynolds ended up filming the first six episodes. Butler introduced him to Gregory Hoblit, who was getting ready to produce *Civil Wars* for Steven Bochco.

"Greg and I hit it off right away," Reynolds says. Hoblit wanted a gritty, earthy look for the series, so Reynolds convinced production designer Paul Eads to use hardwood and linoleum floors on the permanent sets. That allowed him to dolly without laying track. "I shot the show for two seasons, and the cameras were almost always moving. I think we laid dance floor about 10 times, mostly on swing sets."

Hugh Wilson and Reynolds had their first meeting in mid-January of 1993. Soon afterwards, they were scouting locations for *Guarding Tess* in Baltimore. About four weeks later they were in production.

Produced by Ned Tanen
and Nancy Graham Tanen
Directed by Hugh Wilson
Director of photography,
Brian J. Reynolds

Opposite: ***Shirley MacLaine as the feisty Tess.*** **This page:** ***Grocery shopping with the Secret Service.***

Guarding Tess was produced by On Guard Productions, and released in the United States by Tri-Star Productions earlier this year. The story revolves around MacLaine, who plays the eccentric and testy widow of a U.S. President, and Cage, the reluctant head of the Secret Service team assigned to protect her.

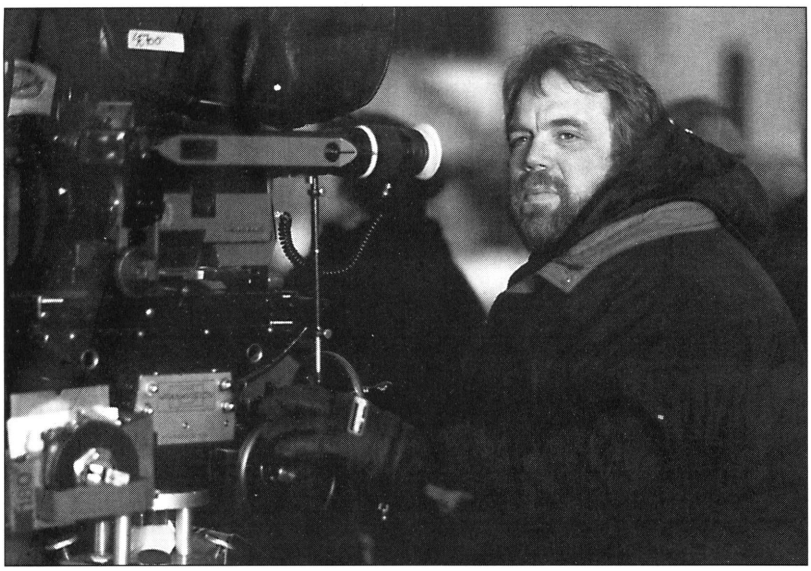
"They wanted to get the film going before the end of winter," Reynolds says. "For me, it was a process of assimilation. We'd look at a location and discuss what Hugh wanted to achieve. Then I designed a look or a feel for that part of the script. Most of these conferences took place in the car driving from one location to another."

Reynolds watched as many of MacLaine's movies as he could find on laserdisc in order to get to know her face and body language.

"I didn't allow myself to be influenced by how other people lit her," he says. "I just wanted to see how she looked from as many different angles as possible.

"A lot of directors will refer you to movies, or they'll watch them with you," he answers. "But you still have to listen carefully to what they say, and correctly interpret what they like. What do they mean when they tell you they liked a particular film? Is it color saturation, the tonal range, or the way a particular lens was used?"

Reynolds took his regu-



Cinematographer Reynolds at the helm.

lar gaffer Steve Crawford and key grip Bob Ivener to Baltimore. Most of the rest of the crew came from the local area or New York (his first assistant, Gary Muller, was from Chicago). Much of the story was filmed in a huge old house, supposedly in Ohio. The crew also shot one day in Washington, D.C., establishing key locations. Other exteriors were filmed in Baltimore, where the architecture is similar to the nation's capitol. Flashbacks to a year or so earlier, when Tess was in the White House with her husband, were staged in a replica of the Rose Garden.

Guarding Tess was filmed in the Academy standard 1.85:1 aspect ratio. "There was some talk about shooting in anamorphic format," Reynolds says. "Hugh thought it might be interesting to have the scope of a wide-screen image during the action-adventure sequences after the kidnapping. But some of the locations we were shooting at were just too tight. We would have been backed up against the wall with a 200-foot magazine hanging off the back of the camera. I think this was the right frame for containing this story."

The film has three distinct visual styles, one being the occasional flashbacks, which are subtly differentiated. The second style characterizes the early part of the film when the story is developed and the relationship between the main characters is defined. The filmmakers were trying for a feel of inertia — Cage's character desperately wants to get re-assigned someplace where the action is, and Tess isn't about to let him go — and during this part of the film camera action is relatively static and Reynolds used very light diffusion.

The story changes pace about two-thirds of the way through the film, when Tess is kidnapped. A frantic search culminates in a massive night exterior scene with helicopters and multitudes of FBI agents converging on a old barn, where it is believed she is being held. By then, *Guarding Tess* has become more of an action-adventure film, more dynamic and with more aggressive camera movement.

On *Guarding Tess*, Reynolds opted to use the Eastman 5293 film for everything but the flashback sequences and some expansive night scenes, where he needed a faster film to dig a little deeper into the darkness. Reynolds says that the 5293 film gave him a reasonably robust exposure index of 250 combined with non-intrusive grain structure.

"It is amazing what the people in this business achieved 20, 30 and 40 years ago, with cumbersome cameras, slow lenses and emulsions," he says. "They were problem solvers, and most of the time they had to invent their own solutions. Today, we have lightweight and compact cameras that we take for granted; wonderful lenses with no distortion at ultra-wide angles; and an incredible palette of films."

Reynolds believes that contemporary cinematographers bear a great responsibility for keeping pace with the rapid evolution of imaging technology. "There are so many ways you can go on a film like this," he says. "We could have used a 500-speed film and really low-key lighting in the neighborhood of four to six footcandles. But I didn't see it that way. I wanted my keylight between 40 and 80 footcandles. I think you can judge better by eye what the final film is going to look like at those levels.

"Hugh didn't want a flat look," he explains. "He wanted moody lighting, but at the same time, he wanted a softness in flesh tones. He didn't want harshly lit characters."

Still, Reynolds avoided heavy filtration. "There is a temptation in this type of situation to be kind to the actress by throwing heavy nets on everything," he says, "but that gives you a mushy look. This film had to feel real. Another technique I use to achieve a realistic feel is to show the audience the ceiling, so they feel it as a real room, and I try not to pull wild walls or ceilings," Reynolds answers. "It makes a psychological impact on the actors and crew when the sets feel as real as possible. If they believe the story, it's easier to engage the audience."

Civil Wars provided a significant frame of reference for Wilson. "He liked the realistic feel of the TV series. It had an unlit look," Reynolds says. "A lot of the lighting scheme for *Guarding Tess* comes from nature, like sunbeams pouring through a window. For the rest, we aug-

mented practical source light."

During the scene in which the agents are rushing to the farm where the kidnappers are holding Tess, Reynolds and Wilson used very aggressive camera movement to pull the audience deeper into the story, and shot it from the perspective of an agent on the scene. There were some hot-head shots, but the A camera was mainly on a Steadicam slicing smoothly through the crowd. The lighting in this sequence was a little harsher, to create a sense of anxiety.

"I loved shooting a long-form film for the big screen. But I'm not afraid to go back and shoot an industrial film if it will teach me something new about minimalist lighting."

Much of *Guarding Tess* was filmed with two Panaflex Gold cameras and Primo lenses working in tandem. There were also a few heavy action scenes where Reynolds used four or five cameras, providing the editor with coverage from different points of view. The camera operator, Erich Roland, also handled the Steadicam.

"Sometimes we made intuitive decisions to use the Steadicam during rehearsals," Reynolds says. "Erich always nailed it in one or two takes. We used it quite a bit, and it integrated smoothly with the more static coverage."

For scenes with five, six and seven players, two cameras were rolling, popping doubles and singles and capturing spontaneous reactions that are never quite the same on reverse or pickup shots. Almost always, the cameras were aimed in the same direction so the lighting was never compromised. Usually, the B camera had a 100 or 150mm lens and was isolated on an individual.

During the first part of the film, Reynolds used very light diffusion filters made for him by Lance Leykamat at Panavision. "They were just enough to take the edge off close-ups, so the skin tones were smooth without destroying the contrast," he says.

Reynolds also made selective use of a very fine black net on the front of the lens on some of MacLaine's close-ups and in a few other situations where he wanted to visually suggest an ethereal look. (Reynolds also consulted with the design, make-up and costume departments to figure out how best to light the various wigs that MacLaine wears.)

Reynolds had a video tap on the A camera. "I looked at the monitor for camera blocking during rehearsals, but mainly it's a director's tool," he says. "A lot of people don't like it — they think it slows things up. But it's a great way to communicate with the operator. You can see what he or she is doing, and that makes communications a lot easier. Playback is also useful for continuity. You can refer to the tape to refresh your memory if you are completing a scene days or weeks after it was started."

Generally, Reynolds opts to stand by the camera and watch how the light falls on the actors' faces. He knows how the image is composed without having to see it on a video monitor. "It's the same as a good boom man who can always find the skyline," he says. "You don't have to look through the viewfinder or at a video tap monitor to visualize a scene. I know that what I see is what I'm getting on film."

Reynolds recalls that 99% of the time his keylight came from outside the room. Some key scenes in *Guarding Tess*, for example, took place on the second floor of a house. Here he had HMIs on a porch and on scissor lifts outside of windows, or

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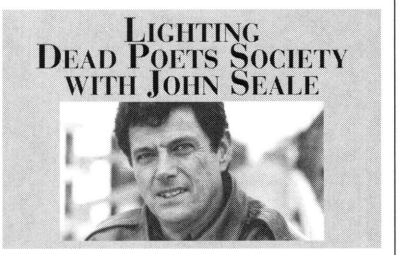

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sometimes a 12K on a Condor.

However, the key to keeping faces from going too contrasty was in using the remaining one percent -- the light inside the room. Reynolds has worked out with Crawford and Ivener a technique for manipulating the fill light using "Dealies," two-by-two boards covered on one side with a Roscoe reflective silver material, and "dimes," similar boards coated with a Matthews reflective material. "We use it as a moveable fill light in tandem with the movement of the camera," Reynolds explains. "You can be selective in your use of fill without wiping out the whole set."

Night interiors in *Guarding Tess* were almost all motivated by practicals, including Chinese lanterns placed under tables. "We rarely ever used a wall spreader at a practical location," he says. "We always tried to have one safe area on the set where we could place a big source light. For night interiors, it would be a 5K or a 10K with a bleached muslin cover. We positioned it at the edge of the frame line. I very rarely hung backlights, because I wanted to be as true to source light as possible."

He started with a 35mm or 40mm lens most of the time. "They come the closest to the way we see things in real life," he says. "On *Guarding Tess*, I tended to avoid the extremes in the use of wide-angle and long lenses. It also gave us a little more latitude for deciding what should be in sharp focus."

Reynolds often allows the background in a master shot to go just slightly soft. "We use neutral density filters to bring the T-stop to around a 2.8." It is almost imperceptible, but it is sufficient to draw the audience to what he wants them to see. "After a while, it's not something that you think about," he says. "It becomes second nature. It is something you do automatically in composing a scene."

One of the most important scenes for both Reynolds and the film takes place during a visit that Tess makes to the opera. It was filmed during a two-day shoot at the opera house in Haggerstown, Maryland. There were some 600 extras in the audience, and MacLaine and Cage were seated in a loge box.

"It was the first time I used a Louma crane," he says. "We had a sweeping shot past the cast and orchestra, over the audience and coming right up to Shirley and Nick."

Reynolds had two other cameras providing overall coverage. But the real challenge was lighting the interior of the opera house without doing injury to the budget or schedule. He augmented practical light by positioning a few 10Ks out of sight of the sweeping coverage. Then, he did a little tweaking and touching up by adding small additional lights an hour or so before he shot.

Reynolds discussed his aspirations in light of *Guarding Tess*. "I loved shooting a long form film for the big screen," he replies. "But I'm not afraid to go back and shoot an industrial film if it will teach me something new about minimalist lighting. I'll gladly work 23 hours straight shooting a music video with a handheld camera and two lights. I'm not averse to doing another TV series if it's with the right people. And I'm still shooting commercials."

Postscript: Soon after completing *Guarding Tess*, Reynolds was reunited with Bochco on *N.Y.P.D. Blue*, the avant-garde TV series which is redefining both the look and pace of visual story-telling on television. It has already earned Reynolds an ASC Outstanding Achievement Award nomination. He earned a similar nomination two years ago for *Civil Wars*. Reynolds is exploring some new visual frontiers on *N.Y.P.D. Blue*, but that's another story.

IFP Helps New York Filmmakers Stay Independent

Independent Feature Project provides creative forum and support for filmmakers operating outside the studio system.

by Brooke Comer

Roger and Me. Swoon. Stranger Than Paradise. My Dinner with Andre. The Unbelievable Truth. Without a venue like the Independent Feature Film Market, these titles might not be so familiar; over the past decade, all of these films were showcased at the IFFM, a production of the Independent Feature Project. The IFFM is a boon to independent filmmakers — especially now, when Hollywood is scouting the independent scene for hot new talent. "The major players have made it clear that they're not only looking for talent from the independent arena," says IFP executive director Catherine Tait, "but that they're looking for it early on, when the price tag is cheaper."

Founded in New York in 1979, the IFP provides more than just a market for independents; the non-profit membership organization gives filmmakers a forum to explore their creativity and to diversify their art. It also acts as a liaison between the local industry and the creative community. The $85 annual membership fee includes listing in the IFP's Talent and Skills directory, access to a resource program which puts members in direct contact with industry experts to answer their questions, admission to seminars throughout the year on topics from financing to production to distribution, discounted rates on production and health insurance, monthly screenings of new works, and admission to the IFFM. Separate fees apply to the market.

Tait describes the organization's inception as a sidebar event of the New York Film Festival in 1979. At that time, the New York Film Festival was focused largely on foreign films, and a number of U.S. filmmakers lobbied for an event that showcased American talent. "American independent films have always had more of a market in Europe than they have in America," Tait notes. "The idea was to create a market here, and out of that effort came the IFP."

"We don't want to rely on old reliable formulas, but rather to see what we can discover in ourselves. That's what keeps it exciting."

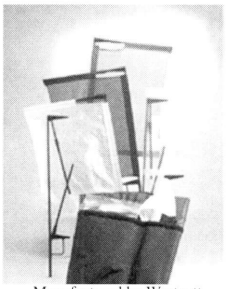
New York was the ideal city in which to base a creative forum for filmmakers. "New York does inspire a kind of artistry," says Tait. "There are so many different people doing unique things here. There are people from different traditions. This community supports individual points of view."

The organization grew quickly. No longer connected to the New York Film Festival, the IFP Market takes place at the same time as the larger festival, and begins one day after the end of the Toronto Festival, "which is serendipitous," says Tait, "because our biggest draw is to get as many foreign buyers as possible. And it's easy to pop down from Toronto for our market. Now everyone is vying for a spot on the calendar."

Everyone is also vying for a niche in the filmmakers' hall of fame. The IFFM attracts big-time industry scouts from companies such as Universal Pictures, Paramount, Fine Line Features and HBO, as well as agents from ICM, William Morris and the Gersh Agency. Filmmakers from around the country are seeking this kind of exposure.

As the name suggests, the IFFM accepts only "independent" films. "We're always struggling with the notion of what an independent film is," says Tait. "Our only real rule is that you know one when you see one." Tait and her team use a criteria based "on budget, source of financing and ultimately subject matter."

What do they look for? Tait describes a kind of creative autonomy that identifies a film as an independent. "It can be as easy as saying Martin Scorsese is an independent filmmaker because he protects the right to have a final cut on all his films to ensure the style of the filmmaking he's promoted. Or there's the low-budget ethic. Then there are the



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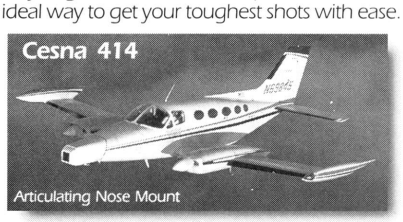

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three- and four-million-dollar films which start to have the look of a studio project. We don't say that an independent film has to be under five million dollars, or that it must meet certain criteria with regard to financing, because often that doesn't make sense."

But the Market does require that financing be put together by the filmmaker, "in the sense that it was independently raised," says Tait. "Not that it can't have foreign money or presale money or studio money in it. But it should be put together by the person or people who made the film."

One way to distinguish between a Hollywood film and an independent project, according to Tait, is that directors of the latter tend to stamp their films with a more distinct, identifiable point of view. "You see Richard Linklater's point of view watching *Slacker*," she explains. "You see Michael Moore's point of view watching *Roger and Me*. People choosing to work as independents are choosing to say something. Their films are either character-driven or socially conscious because of the subject matter or because of the way that subject matter is treated. There's no science to it." But there are parameters. The IFFM does not accept genre films, action thrillers, "or canned Hollywood-type products," says Tait.

Seventy-five to ninety completed features are selected for screening at the IFFM, along with a hundred or so works in progress. Those in the latter category are equally important, Tait explains, "because often they are films that have shot everything but can't get the funding in place for postproduction." In such a case, exposure is everything. If an agent or producer spots talent, financing to complete the project could be forthcoming.

Short films are a category in the market, "but we don't consider ourselves a market for short films," Tait stresses. "These shorts are important because they become portfolio pieces for a first feature. We realize the value of a short as a calling card for a future feature." Tait cites the case of Huong Duong, a Vietnamese-American whose award-winning short film *Heavy Blow* earned the attention he needed to break ground on his feature.

Despite the opportunities available to IFP members, Tait recommends that aspiring filmmakers seek alternative support offered in the New York area. She points to Spike Lee's Forty Acres and a Mule production company. "Spike's building a community," she observes. "He gives seminars and organizes programs. He's definitely committed to fostering black filmmaking in the city."

The Association of Independent Video Filmmakers (AIVF) is another resource group. "It's a national organization, but because they deal with video as well as film, they have a broader mandate and include more documentarians and experimental filmmakers. They cast a wider net than we do, as we're specifically focused on independent feature films," says Tait. "Our whole mission is about connecting the filmmaker with members of the

IFP Gotham Awards

Recipients of this year's IFP Gotham Awards, announced in July, were honored at a gala at Roseland in New York City on September 20. Sam Cohn of ICM received the Gotham Lifetime Achievement Award; filmmakers Joel and Ethan Coen (Hudsucker Proxy, Raising Arizona, Barton Fink, Miller's Crossing) *snared the Gotham Filmmaker Award; actress Sigourney Weaver was given the Gotham Actor Award; screenwriter Terry Southern* (Easy Rider, Dr. Strangelove) *was presented with the Gotham Writer Award; and composer Howard Shore* (Ed Wood, The Client, Philadelphia, M. Butterfly) *took home the Gotham Composer Award.*

business community, like an agent or the acquisitions executive at New Line or Samuel Goldwyn."

Many sectors of the local industry support independent filmmakers in tandem with the IFP. When Tait joined the organization, basic supporters like DuArt Labs, Laurel Entertainment, Technicolor and Kodak were already in place. "I've tried to help expand that network," she notes. By bringing more vendors into the IFP program, Tait is helping to create a community for filmmakers. "If you're going into production," she says, "the $85 membership fee will pay for itself many times over with all the member-discounts you'll receive."

Tait cites Kodak's Bob Mastrionni, who coordinates the IFP's Kodak Frequent Buyer Program, and Irwin Young of DuArt, who has long worked closely with independent filmmakers, as two industry fixtures who tailor prices to budgets. "Filmmaking is an incredibly costly business, and it's important to meet other filmmakers, to see what's going on in terms of trends and changes, and to learn to cut corners on costs. That's the kind of community we're trying to support."

What kind of trends or changes have evolved in the independent film community lately? Over the past two or three years, Tait has noticed a new look in low-budget films. "There's an established aesthetic for this kind of filmmaking, which is typically very gritty, a Lower East Side, black & white, handheld camera, guerrilla technique," she explains. "We owe a lot of that to the cinematographers."

In terms of content, Tait sees more disturbing storylines. "Not romantic comedy," she stresses. "Not at all." She suggests that young filmmakers are creating a reflection of their own times, "struggling to put together films that are edgy and reveal the crises that their generation faces."

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technology and an increase in film school enrollment made aspiring filmmakers a different breed today than a decade ago? "They are younger but perhaps less educated," says Tait. "So many people have the desire to make films, which expands the talent pool. There's also more competition, which means that fewer achieve employment, let alone success."

During the IFFM's orientation meeting, Tait and her team "try to give these young people a dose of reality. They may not sign a three-picture deal, like Rob Weiss. His rags-to-riches story is rare: he raised financing privately for *Amongst Friends* and now he has a deal with Universal [see *AC* June 1993 for details]. We tell people the most they can hope for is to learn what it is to be a filmmaker and to make valuable contacts." Tait looks back at the 350 projects from last year's IFFM and counts eight with distributors, 40 that were invited to festivals, and 20 that were sold. "None of them have broken out to become *The Crying Game* or *sex, lies and videotape*," she notes. However, Sony Classics picked up the documentary *Martha and Ethel*, while Miramax is due to release the ultra-low-budget *Clerks* (directed by Kevin Smith) in the fall.

When a film does break out, it's often the director who wins highest praise. "We do tend to focus on the writer/director," Tait admits, "but we're trying to develop a production library so we can show promo reels for talented cinematographers like Ellen Kuras, who shot *Swoon*. We want to build a stronger role for directors of photography."

Kuras Finds Independence Liberating

Observers of today's American filmmaking scene have noted the rise to wider renown of an increasing number of cinematographers. In independent cinema particularly, budget constraints, the need to stand out in a crowd, and freedom from studio homogenization have meant added respect and recognition for the cinematographer's crucial role in the visual language of filmmaking. Ellen Kuras, whose work on *Swoon* won a Best Feature Cinematography award at the 1992 Sundance Film Festival, is a successful director of photography whose conscious choice to remain in New York, connected to the independent circuit, offers insight to the aspiring independent cinematographer.

"Independent filmmakers tend to work in families," Kuras observes. "They share a certain loyalty. You know you're working towards a creative end. Ideally, it's the kind of rapport Sven Nykvist has with Ingmar Bergman. They are connected. They are family."

Kuras, whose credits also include parts four and five of Jim Jarmusch's *Coffee and Cigarettes*, *Postcards From America*, and *Angela*, likes the creative atmosphere fostered in the close-knit style of independent filmmaking. "You can always try out new ideas. Work never becomes staid. You're working with people who know your sensibilities and know how to challenge you. A lot of it has to do with trust."

When *Swoon* director Tom Kalin discussed making a second film with Kuras based on a short story by Jane Bowles, "we talked about changing the look of the film, so it doesn't harken back to *Swoon*. We don't want to rely on old formulas, but rather to see what we can discover in ourselves. That's what keeps it exciting. You're creating something new each time you go on the set. Tom and I had to have a certain understanding to achieve this together."

Kuras moved into cinematography when she realized "the different ways that photography allowed me to express myself." Though she earned a degree in anthropology and structural linguistics at Brown

University, the Fulbright scholar "always wanted to shoot a film."

Female cinematographers are less and less rare nowadays, but back in the early 1980s, Kuras had few role models. "I couldn't just go out and apprentice myself. I had to pick up a camera and learn on my own." She decided that if she was going to break into the film world, she should know that world from the ground up. Kuras worked as an electrician under Frank Prinzi for a few years, "and learned a lot from the way he looked at light and ran crews."

> **"Independent films are usually made by directors who are looking for new ways to see movement, light and narrative structure."**
> **— Ellen Kuras**

Kuras had enough contacts to move to Los Angeles and climb the ranks in television, but she made a conscious choice to stay in New York. "When I read a script, I look not only for visual values but for substance. I find that New York scripts have spirit. They have something to say. Some Hollywood scripts have something to say, but in New York, you find yourself with more chances to work with people who are really pushing the envelope. But I'm also very interested in what's going on in L.A., and I keep a close eye on the work that's being generated there."

Kuras became a director of photography by convincing producer/director Ellen Bruno to let her photograph a documentary in Cambodia. Kuras was then an electrician and production assistant, but had yet to shoot her first film. "Ellen pointed out that I didn't have a camera and she didn't have the budget to rent out," recalls Kuras.

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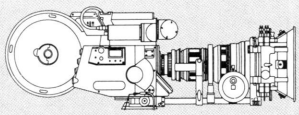

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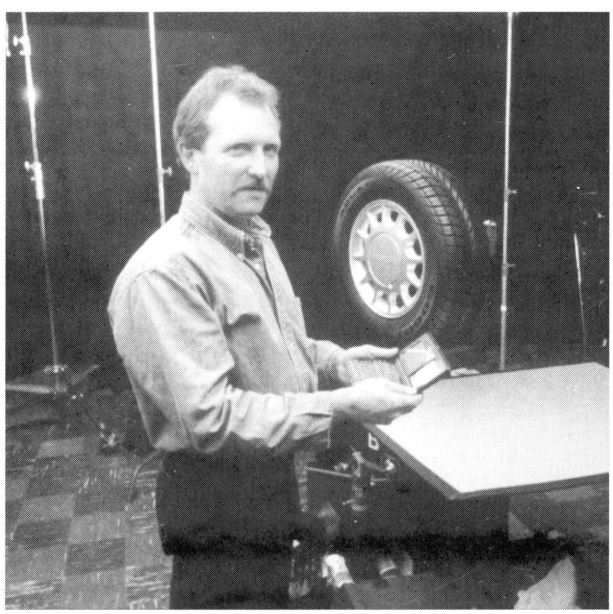

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Instead, Kuras borrowed money from every family member she had, and within the week had a used Arri SR2. She and Bruno then headed off to become the first film crew to shoot in Cambodia since 1975.

The resulting film, *Samsara*, is a documentary about death and rebirth, "a lyrical story about the spiritual death of the Cambodian people" which also touches on socioeconomic issues in post-Pol Pot Cambodia. "I didn't know what it took to make a documentary. It was frightening," she admits. "I had to draw on my intuition and shoot what I thought was important." The film won 25 awards internationally and gave Kuras a name as a documentary cinematographer on her first major project. "It also helped me realize I could use the camera in a certain way to say something," she adds.

Kuras was still searching for her first break in the commercial world when Christine Vachon, whose Apparatus Films produced *Swoon*, asked Kuras for a reel. "I didn't even have one," Kuras recalls. Kalin presented her with a "fragmented, narrative script about the Leopold and Loeb crime case from the Twenties, and spoke briefly about the look of the film." Despite the fact that she'd never shot a dramatic feature, Kalin recognized the vision Kuras had instilled in *Samsara*, and hired her to shoot *Swoon*.

"The most important thing about my relationship with Tom was that we shared a common sensibility and aesthetic, and a basic trust," she explains. "I had to be able to get into his mind's eye so I could render it on film."

There was little preproduction time on *Swoon*. "We worked hard to figure out how to make the film with the amount of money and time we had. We looked at Bergman films. We scouted locations together. By the time we began shooting, I already knew what Tom had in mind. We had our basic shorthand. We could move quickly."

Kuras finds flexibility in the independent world. "We can experiment by depicting the world in a new and interesting way," she observes. "There's a certain kind of formula film that can be confined by convention, by the fact of making the traditional reaction shot match cuts, and by adhering to a strict narrative flow. Independent films are usually made by directors who are looking for new ways to see movement, light and narrative structure. I find it a real challenge to design shots so they're more revealing, and to make images that share inherent meaning beyond their literal value. *Swoon* was extremely low-budget, so we didn't have time or the luxury to overthink scenes. We had to rely on intuition and be as creative as possible."

What is low-budget? According to Kuras, anywhere between $250,000 and $1,000,000 is considered a low, low budget. "I've had to construct my lighting order and camera package according to the confines of budgets," she explains. "I've even gone without essential tools." She is reluctant to work on very low-budget projects which don't allow her to get the camera package, lenses, dolly equipment and lights that she needs. "If I need cranes or scaffolding, I want to be able to ask for it and get it."

General Camera and Camera Service Center in New York are responsive to Kuras and other independent cinematographers. "Depending on how busy they are, they'll make deals. We'll rent a truck and a driver." She adds that gaffers, technicians, and "anyone with a truck" is part of the independent network. "It's a big family," she adds.

Kuras owns an Arri SR2, and likes to use a Primo zoom "because so much of my particular style is tied up in transparent zooms." She doesn't think her films suffer from the lack of prime lenses, however: "I'm still able to use the filtration I want without having the film go too soft. It gives the picture a certain roundness, a certain flow that is part of the way I see."

At one point, Kuras had thought of having a grip design a way to put the zoom on the geared head, so she could zoom at will while using it. "Normally, you have an assistant zoom for you when you're using the geared head, but I like to have the ability to do it myself. In some instances, it's a slight adjustment based on intuition, and it depends on the emotion of the scene at any given moment." She eventually opted to use the fluid head instead, because it gives her "the same sort of natural moves, which gives life to the camera."

Will cinematographers eventually gain the kind of renown they deserve in the independent world, where so much attention is focused on writer/directors? Kuras, for one, believes this respect is already accorded. "There's no longer the auteur theory that directors are the sole creator of a film," she points out. "It's more of a collaboration now. Cinematographers have come into their own because they have a certain signature. I think we're more conscious of cinematography when we watch movies. Perhaps independent filmmakers have helped to make an audience aware of the role cinematographers play in designing the look of a film."

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The Violin Player Provides Sweet Music at Cannes

Cinematographer Charlie Van Damme makes an impressive directorial debut.

by Stephen Ashton

A first feature film in competition at Cannes always causes excitement. In the case of *The Violin Player*, an Official Selection of this year's International Festival of Film, Charlie Van Damme's directorial debut gained by his experience as a director of photography. Van Damme has worked with some of the greats — Alain Renais, Andre Delvaux, Agnes Varda and a host of others over the last 24 years. "They each taught me a lot," he said in a conversation after his successful screening in Cannes. "I was spying.

"As a director of photography I was always close to the actors and directors," he says. "One cannot arbitrarily light a scene; one must create an atmosphere. I always felt that I could not give, *may* not give an atmosphere that would be in contradiction with the feeling given by the actors."

Making the transition from cinematographer to director had its hidden aspects, though. "The first day, when you have to say 'action,' it's surprising," he confesses. "The difference between actors, the director of photography, and the 'captain of the ship' is the level of responsibility and the number of decisions one has to make in a day."

The *Violin Player* tells the story of Armand Becker (Richard Berry), a virtuoso violinist who becomes discouraged with his life with the symphony crowd and moves underground to the Paris Metro. There, he begins to play "everything his memory murmurs to him," accompanied by the sound of rushing feet and rumbling trains. He has a goal of bringing the emotional power of fine music to the average person, and the unfriendly and alienating environment challenges him.

"One cannot arbitrarily light a scene; one must create an atmosphere."

The main character of the movie is music. The leading actor, who had never taken the instrument in his hands before he agreed to the part, studied six hours a day, seven days a week, for five months to be able to "violin-sync" believably. The visual framework of the film was inspired by the works of Beethoven, Eugene Ysaye and Johann Sebastian Bach, which, along with original music by Vladimir Mendelssohn, were essential components of the narrative veneer of the film.

"Armand, the violinist, is treated like a lonesome cowboy with a violin instead of a shotgun," says Van Damme. Virtuoso contemporary violinist Gidon Kremer, who performs the music in the film, plays the violin the way "Jimi Hendrix plays the guitar or John Coltrane the sax, shattering the barrier between serious music and popular music. The music forced us to discover an unexplored relationship with image that would place the audience in a new type of receptivity: music as a go-between for the Metro passengers and Armand, between them and us, the audience, to bring us closer to those whom otherwise we'd refuse to see."

The music inspired Van Damme to "find the generosity of Cartier-Bresson's or August Sander's gaze, with the secret hope that at the end of the film, the members of the audience would look at one another differently. Armand's music is meant to release our buried charity."

Producer Rene Cleitman — whose credits include Bertrand Blier's *Ménage*, Patrice Leconte's *Tandem*, *Monsieur Hire*, and *Tango*, Bertrand Tavernier's *Life and Nothing But* and *L'Appat*, and Yolande Zauberman's *Me Ivan, You Abraham* — was fascinated by *The Violin Player* from the moment Van Damme brought him the script. "The first script was very strange because on the left page, usually blank, he put the music — the music is permanent in the movie, so the music is the same as the pattern of the movie." That the music was inseparable from the film presented the greatest challenge for Van Damme. "For him," Cleitman explains, "music wasn't a 'thing' to be filmed and presented in a flattering manner, but the unique challenge of his film, without a historic pretext."

Van Damme began by recording the music first. He explains how important it was to make a "very special recording

based on the character, one made more romantic, more emotional. It took a lot of work to get to feel the spirit of the music." Every scene was storyboarded and music was recorded to be played during the shooting, particularly since so much of the film included scenes of Armand playing.

"It was challenging to make a visual rhythm and musical rhythm work in harmony . . . The camera . . . has its own rhythm. It acts as a second voice in relation to the music."

Actor Richard Berry had the formidable job of becoming an authentic-looking symphony violinist in five months under the tutelage of violinist Alexis Galpérine, and found it "a huge, almost impossible task. An awkwardly placed finger wasn't acceptable, nor was too short a vibrato." Van Damme was present at every le sson, which, along with Berry's "genuine affinity for the violin," helped tremendously, says Galpérine.

Van Damme jumped into shooting his very first day on the set. He decided to shoot one of the most complex scenes first, one which incorporated everything — music, dramatic sequences, extras and a confined setting. "I was trying to keep cool on the first day, and tried to anticipate the problems of the next few weeks, so we shot a difficult scene. It went very well," he declares.

The Metro serves as an important metaphor to Van Damme. "What does one do in the Metro, besides pass through? After all, that is the Metro's function, taking people through. Stopping, dawdling and dreaming have no place there. It brings together a crowd of individuals without uniting them. In the Metro, politeness limits itself; proximity is a constraint and a threat. In the evening, during the rush hours, everyone tries to get home to the TV as fast as possible. Some people seek shelter there because they don't know where else to go.

"There is certainly something sacrilegious and violent in this confrontation, but I thought if this violinist could manage to create a moment of beauty and true emotion there, then perhaps each one of us could try to find part of the answer to the question, 'Why do I do what I do? Why do I play violin? or Why do I shoot films?' This theme provided the basis for a film that would deliberately be a break from the mood of our times," says Van Damme.

Armand Becker takes his violin deeper into his society, to live in the nooks and crannies with the easily dismissed people and, like Bach, brings life to the "human desert" that is the Metro. Van Damme picked up the vision where Armand left off, taking an anti-hero in an anti-setting to bring his audience in deeper.

To get "under Armand Becker's skin," the whole production moved underground to an old part of the Metro. The crew took the same Metro to work then, and really lived as the characters did. "We were in darkness from morning until night," Berry said. "I experienced Armand Becker's gradual decline, too, sleeping on the ground, drinking red wine." Cleitman said he was "feeling the movie" when he went home every night, but his experience didn't stop there. "*The Violin Player* inspired me to decide to learn to read music," Cleitman said. "I cannot live now without the piano."

In spite of Van Damme's background as a director of photography, he worked like a director with regard to the lighting. "I wanted everybody to be creative, to give ideas of their particular area of expertise. The director of photography was an old friend, Walter Vanden Ende, who shot *Toto the Hero*. We are very good collaborators, having shot together as co-directors of photography in the past. The film has a definite rhythm to the lighting, reflecting the mood of the protagonist as he descends further into the depths of his soul-searching journey (and deeper into the tunnels under Paris); all the while, music is uplifting his spirit, even when he plays the music on the air without an instrument.

"We had two basic ideas about the visual style, the cinematography," Van Damme says. "Two ideas in opposition: one was the effect of reality and the other the unreal, dreamlike. And our approach was always leaning toward the simple. [We chose] to let the music dictate the cinematic style.

"We shot on Eastman 96 and we both (Van Damme and Vanden Ende) like a rich negative, so we rated it at 320 or 400. We used a lot of bounce light off polyester. For most of the subway scenes, we used fluorescent light units with six or eight lights each, and could change the color temperature according to the base light of the Metro. We liked to play with the light, to let it go green or blue.

"We also used sodium lights, which were more orange-yellow. But it was all completely controlled. When necessary we would replace the lamps in the Metro. We also used HMIs."

The crew was especially proud of the results of their work in one of the final scenes, in which Armand is seen standing in a moving boat in an underground canal, playing the violin, passing from one pool of light to another as if it were coming from overhead grates.

Subtle changes in lighting were dictated by the music. The emotional nature of the characters was also influential, particularly as the lighting would

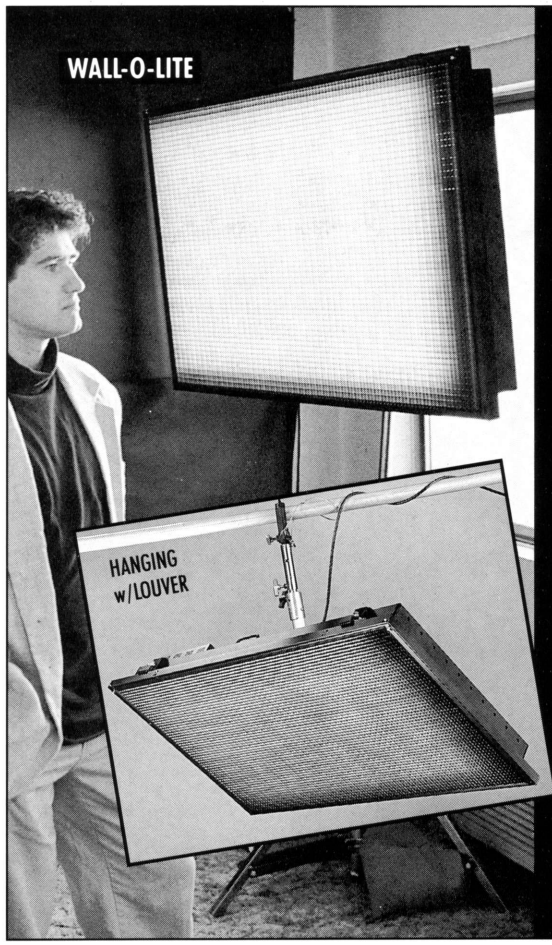
imply a dream. "There we would use more colored light, reddish or bluish. Vanden Ende does something wonderful with the fire scenes — he used reds and *greens*. It is very interesting and a real surprise for me. I never did that.

"The challenge was not with the light as much as with the framing and rhythm," Van Damme allows. "It was challenging to make a visual rhythm and musical rhythm work in harmony. We were always considering how to move, to follow the rhythm of the music or develop a separate visual rhythm. It is really polyphonic. The camera moves throughout the film, but always without drawing attention to itself. It must be natural. Of course the camera has its own rhythm. It acts as a second voice in relation to the music.

"We didn't use zoom lenses, only Zeiss fixed focal length lenses, not high speed. With today's emulsions we didn't see the need to shoot with high-speed lenses. This gave us an effect of real distance to the character. When you move in on wheels with a fixed lens, you take the audience with you. It becomes intimate, and the actor feels you coming closer. His performance is more as if you are really engaging in his space. Also there is a big difference between moving to a close-up with a 50mm versus a 200mm. With the 200mm you have the attitude of a voyeur, a paparazzi.

"We were always in movement and we were fortunate to have a great key grip, Beniot Theunissen. Beniot moved the dolly as if he were a dancer or a musician. He required only a single rehearsal and was perfect every time. He is really responsible for the harmonious movement of the camera," says Van Damme.

"Our camera was the Arri BL in the standard format. I didn't want to be distracted by shooting in CinemaScope for my first time as a director," Van Damme confessed. "With 'Scope



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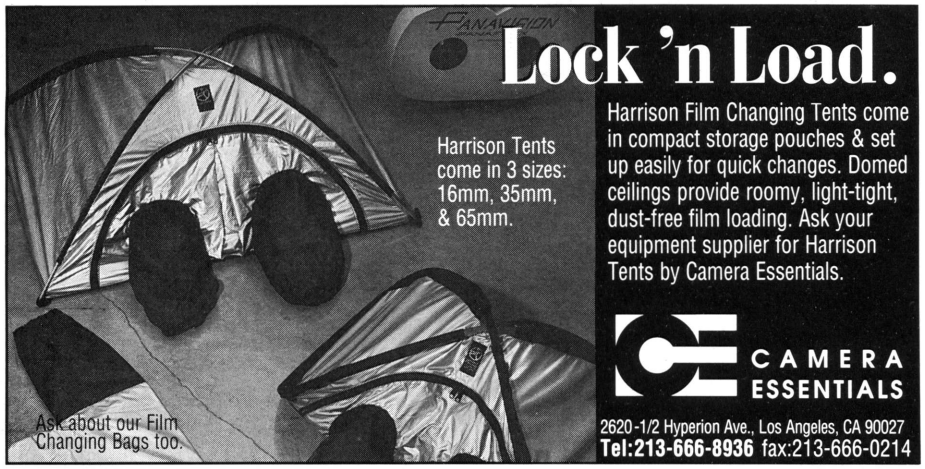
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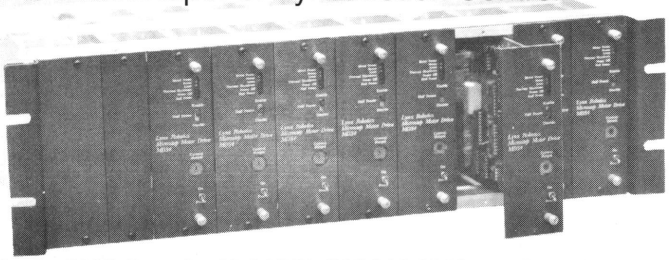

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it is always dangerous. You have a close-up and wide shot at the same time. I don't think I could have managed to think of the [directing] on two levels for my first film. I had plenty to think about as it was," he confides.

The end of the film is a fourteen-minute performance (recorded by Kremer) of Bach's "Chaconne," a piece considered a kind of monument to the violin. For Kremer the piece is reminiscent of the North Pole, which he has visited, where there are "no objects, no colors and everything is there: a simple crack in the ice means an infinite variation, a galaxy of variegations, the whole chromatic range of white. And the attempt to show that in the human desert of the Metro is a formidable challenge!"

The long uninterrupted musical sequence provided the filmmakers a rare opportunity to have the climax of a film be portrayed without dialogue, and even without a linear dramatic framework. At once challenging and liberating, the film gives the viewer a personal opportunity to envision the music, and at the same time conclude the story. Van Damme's approach is to transform the images which are inspired by the music. It is very free in its interpretation, incorporating images of nature which stand in contrast to the rebirth which takes place underground in the Metro.

"I still love to light," Van Damme says. "I like to create light for theater as well as film, and I teach. I think that directing has tempted me to be more simple in my cinematography. This actually makes the process more rigorous and creates a sense of serenity. My lighting is now less decorated, more essential. And as a director I learned to respect the actor much more."

Asked what he will be working on next, Van Damme replies, "I am taking a rest: I am doing a TV production!"

Sundance Labs: Learning by Teaching

Reminiscences by participants — both advisors and advisees — in the Sundance Institute's June Filmmakers Lab.

Michelle Satter,
Director,
Feature Film Program at the Sundance Institute

After 13 years, I'm still inspired by the work at the Sundance Institute. In June, nine directors spend three weeks away from the pressures of making a film to experiment and push the boundaries of their work, to find out what they know and don't know, and to open up to an accelerated learning process. Production crews, actors, creative advisors (accomplished directors, cinematographers, editors, actors, and writers) come together to focus on the individual journeys of the nine directors.

> **"Teaching can be bracing. Good teaching has its quotient of self-confrontation."**
>
> **— Arthur Penn**

I am particularly struck by the generosity of the community and moved by the willingness to participate and learn. We are all reminded of our passion for the work and for the creative process. Each day is long and filled with challenges, small failures, camaraderie, and the sense that we're all in this together. And there's always the possibility of taking a hike to a waterfall, looking up at the mountains and putting filmmaking in its proper perspective.

This year, as the three weeks of rehearsing, shooting, and editing scenes on videotape came to a close, before we all went back to the real world to brave the pressures, we asked for the personal impressions of the creative advisors and filmmakers who attended the 1994 June Filmmakers Lab.

Joan Darling,
Creative Advisor

The 1994 Sundance Film Lab was my second opportunity to function as a creative advisor. Suffice it to say that I would have canceled anything to participate again after my first year's experience.

At Sundance one expects to have an interesting and stimulating experience with new filmmakers. But what surprised and delighted me was how creative and enriching the experience was for me personally.

Every morning you meet with a group of your peers, most of whom you admire so much you wonder what you're doing there, and discover the commonality of experiences. You get to hear some of the finest directors in the country discuss film. Much to my delight, the advisors I met were all concerned with the spiritual quality of the experience of filmmaking. We wanted very much to arm the young filmmakers with an awareness of the importance of the quality of their life and work experience, and to help them to see that ultimately the size of their success was unimportant by comparison. Until Sundance, I had felt very alone in this mission, and it was comforting to discover that I was not. It was also comforting to find that all directors have the same problems and frustrations with the business, no matter the size of their reputations.

The interesting thing about the work with filmmakers is Sundance's devotion to the process. Sundance wants to allow filmmakers to learn their own way of making films, rather than have advisors jump in and teach before they can make their own mistakes. At first I had to fight the desire to tell the filmmakers everything I knew — to direct their film for them. But as I went from set to set watching each filmmaker struggle, I began to find a balance between offering information and waiting until a filmmaker got in enough trouble to ask. Then learning really began.

I also made it a point to check in with the filmmakers socially and offer comfort and mothering and encouragement, and to let them know that we cared about and respected them.

In relation to my own work, I learned I was not alone. I learned that people I respected in turn respected me. I learned to be more demanding of myself in solving shooting problems. I had wearied of the film business, and the Sundance experience helped restore a great deal of my enthusiasm and joy — and the horseback riding was swell.

Arthur Penn,
Creative Advisor

At Sundance, we, the creative advisors, had the chance to begin again; not our film careers, but others'. Now we could be wise, patient and aware that the process requires time and failure and small success followed by small success. We could counsel from experience. We could help the director-writers find in their

Photo by John Schaefer

An impressive lineup of creative advisors included (from left): Michelle Satter, Robert Redford, Arthur Penn, Sally Field, Jeremy Kagan, Craig McKay, Joan Darling and Steven Poster, ASC.

actors aspects of the characters they had in mind when creating the work, and to de-emphasize the similarities.

Again and again we sought to give the directors confidence in the process of filmmaking, a process to be found only in the relationship of the director to the actors and to the scene. We then helped them use the camera to realize their vision.

We also sought in personal conferences with the participants to open options, to encourage other approaches — and not always successfully. In some instances there was resentment to our methods, which I must confess were sometimes heavy-handed. In other instances there was an unwillingness on the part of the director to admit the validity of other choices.

It was a gratifying experience to engage with new directors as they reached into the medium of film in search of meaning. Often I was brought up short at the disparity between my advice and my own work. Some of the failures I had committed by not trusting process were made clear to me. Teaching can be bracing. Good teaching has its quotient of self-confrontation.

Steven Poster, ASC, Creative Advisor

It seemed that the creative advisors got as much out of the week as the lab participants. I've never seen so much creativity and spirit in a group of people who were there to teach and not to do. I think to some degree we were redefined; we rejuvenated our concepts of how and why we work the way we do. We all learned from ourselves and from each other.

But enough of all this stuff. Let me tell you what really went on.

Our day started when breakfast was served. This was the morning social gathering where everybody would sort of check in with each other. We answered last-minute questions from the directors who were shooting that day and talked about editing with those directors that were editing what they shot the day before. We gossiped and told war stories and ate a lot.

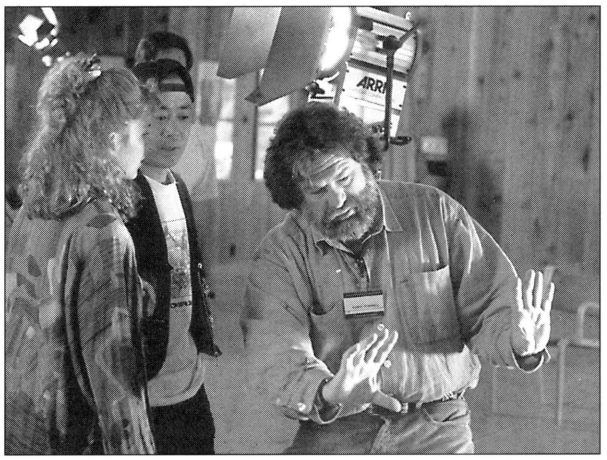
After breakfast the filmmakers went off with their actors to shoot or rehearse or edit, while the advisors and staff met to discuss what happened the day before and evaluate the progress of each participant. These lively discussions were led by Jeremy Kagan, who was the artistic director of our group, and Michelle Satter, the program director. We each discussed our contacts with and observations of the filmmakers with whom we had worked the day before. We also decided our plans for the day, which included observation, either individually or in groups, of the filmmakers' work. We tried to plan not to all go to the same place at the same time so as not to appear to be ganging up on the participants. We also planned one-on-one discussions with each filmmaker, which usually took place during lunch. These review and planning meetings lasted up to

an hour and a half and were quite spirited and fun.

When the meeting was finished, we would disperse to begin our day's observations and counseling sessions. Watching the various productions was both delightful and difficult. The fun came in watching the enthusiasm of the participants, which brought back fond memories of a simpler time when we were all getting started in the film business. The difficulty was in finding a level of restraint — rendering helpful instruction without jumping in and saying 'watch how I would do this.' We all resisted taking over for the sake of the participants, but it would have been fun to shoot some of these scenes.

Photos by Sandria Miller.

Top: ***Rehearsing a scene, clockwise from middle, are Joey Pentiliano (in headband), Shawn Schepps, Jayne Brook, Tate Donovan and Kyra Sedgwick.*** **Below:** ***Robbie Greenberg, ASC frames a moment with Hiroki Ryuichi and Suzi Whear.***



Lunch was more advice and schmoozing and a lot of food. One-on-one counseling sessions involved tough discussions about the filmmakers' work, the scripts and the work with the actors as well. We all went at this with a sense of responsibility, knowing we couldn't pull our punches with these young filmmakers. The tough lessons that we all had learned in our careers had given us the desire to help the participants get tough. The realities of the business and the difficulties of practicing the art may have been the most important lesson we had to impart.

After lunch we continued our observations of the rehearsals, productions or editing sessions. I began to notice that the filmmakers and the cinematographers were somewhat lacking in their ability to work together. Thinking that I might be able to help in this area, I asked for a meeting with all the cinematographers to explain my approach to relationships with directors. A lively discussion ensued, from which everyone, including myself, seemed to benefit.

I also found that my discussions with the directors centered on the visual interpretation of the script and methods of achieving that vision. I also discussed various directors and their methods of working with me.

Through the process of intellectualizing my methods, I realized again how complex relationships with directors can be. Cinematographers are in a very sensitive position; they can either support the director's vision and interpret that concept photographically, or propagate an ego struggle which produces very little in the long run.

Then came dinner, more socializing and of course, more food — I was thankful for all the exercise we got walking up and down the hill to our cabins. It took a few days to get used to the altitude as well.

After dinner we watched movies in the screening room (some the work of the advisors) or did readings of the participants' scripts, which helped the directors to get a perspective of the whole script. They were also quite fun.

At the end of the week, there were full critiques of the scenes that the filmmakers had shot and edited. After seeing the films, the advisors had a roundtable critique with the artist. These sessions were frank and probing. We all reached down to our beginnings to be helpful and compassionate, without holding back valid criticisms. Praise was given when it was due. We were all pleased with the progress made by the participants during this short week.

It seemed that we had just arrived when it came time to go home. Yes, I had a great time. Yes, it's like going to film summer camp. But no, it's not a school. Sundance is a process. I'm

sure that if the filmmakers got as much out of this week as the advisors did, we'll see some very interesting work in the years to come.

Lisa Krueger, Filmmaker

I had come to the Sundance Filmmakers Lab mainly to explore the mysteries of acting. I had directed non-actors before; now I wanted some experience with experienced actors. I wanted to understand first-hand how they did their thing, and what they needed from me as a director. Thanks to a great cast and some legendary advisors, I learned more on any given day of the lab than I thought I could learn all month. Most of it had to do with the "human" requirements of directing — laying out a wide enough net for people to take chances, radiating unlimited faith, getting more naked (emotionally) than the most naked person on the set. Of course I could always have figured these things out in my head, but the lab injected them directly into my bloodstream, which is probably the only place that matters.

"I'm sure that if the filmmakers got as much out of this week as the advisors did, we'll see some very interesting work in the years to come."
— Steven Poster, ASC

The big bonus of the lab for me was working with Bill McDonald, my cinematographer. As luck would have it, Bill possessed by nature a lot of the qualities I was trying to nail down as a director — patience, generosity, and faith to burn. In other words, he was a good influence. He also had great ideas and an infinitely open mind. We conspired on everything from lens height to the point of view of a given scene, and how these elements related to the whole script, which Bill knew cover to cover. And although the official Sundance credo was "process over product," I won't deny how great it felt to see those scenes on the big screen actually looking good, thanks largely to Bill and the crew. In fact, this is part of the other great Sundance gift, aside from all the learning — you walk away with a brazen, rock-solid conviction that your script will one day be a movie.

James Mongold, Filmmaker

I arrived at Sundance five days after wrapping my first failure, exhausted, my nerves raw. Why did I come? Validation? Ambition? Yes, these things brought me. But what I gained was something more profound.

Standing beside me in the thin air, in this almost nauseatingly beautiful valley, were seven other remarkable filmmakers, strangers to each other. It would have been easy for us to drift into a sharp-elbowed industry dance — gunning for favored status with advisors, perks from the Institute, forming cliques — but that did not happen. As if orchestrated by the institute, we weren't playing with the same cinematic ideas, so we weren't treading on each other's turf.

For the first time in my creative life — and I would guess this was true of the others — the level of resources (advisors, equipment, crew, actors) and the number of people requiring those resources (the eight of us) were even. Perhaps the selection process that put us here could seem cruel or arbitrary — I had been rejected for previous labs. And perhaps the world that awaited us afterward would be the same. But for a month the valley was film heaven.

Anyone who has banged around the industry a bit acquires a thick skin, a careful pessimism, a defensive posture. You maintain a steady sad belief that the person on the other side of the desk, questioning your vision, has not read or seen your work.

When I sat down with Robert Redford to talk about my script and dailies, he had actually read and seen them. And he had watched my other films, too, and carefully. The same for Morgan Freeman (who read my script aloud) and Alan Pakula (who thoughtfully watched me direct), Arthur Penn, Sally Field, Paul Brickman, and John Landis — experienced filmmakers who had left their lives behind for a couple of weeks, for me (and seven others).

I realized that wherever it was I had been trying to get for the last ten years, at least for this moment, I was there. Although I was exhausted from the struggle of making a low-budget feature, this was a chance to make something without racing against the clock or making a page count. Yes, I received great notes on my script. I shot a few decent scenes. But I also remembered the simple joy of making something and having the luxury of time to consider my decisions.

Sitting here six weeks later — with the knowledge that generalizations about life and art are often baloney — it seems that the liberating part of Sundance was the inability to hide behind well-developed defenses. They were unnecessary. The ability to survive the criticism — which could be intense — was tied to my sense that I wasn't about to be cast aside if I didn't offer the right answers. I wouldn't be left in a waiting area flipping magazines, denied funding because I had no stars, or simply stamped untalented. On the contrary, it became clear that I was scrutinized and criticized *because* I was being taken in, given resources, and stamped talented. There are very few places — even in film schools — where this happens. I was very lucky and I know it.

Randy Redroad, Filmmaker

As a Cherokee and person of color, I am vulnerable to the film medium. Our people have been harmed by the irresponsible, racist, genocidal myths that Hollywood has produced since the beginning of its dysfunctional life. We must be careful what images we ingest because we will be forever recovering. And yet I am in love with the potential of film as mythology. It was with this colonially manufactured schizophrenia that I traveled to beautiful Ute Country to the Filmmakers Lab.

The lab is revolutionary in its structure and ethic. To be able to shoot scenes from an early draft of a feature-length script with success measured in terms of expression and experimentation is rare indeed. We were encouraged to try new things and even fail. This was wonderful. I felt no condescension from the creative advisors and no unhealthy competition among the filmmakers. I'll be eternally grateful to Joan Darling, Morgan Freeman, Gyula Gadzag, Sally Field, Arthur Penn and Robert Redford, who shared their wisdom, experience and even secrets freely.

There were four different crews at the lab. It was luck of the draw in terms of who worked with whom. Five minutes after meeting my cinematographer, Bill McDonald, I knew I was lucky. I am used to working with someone who is in sync with me not only creatively but emotionally. I was thrilled to find out that Bill was in tune to the spiritual aspects of filmmaking as well as the technical. He never stressed out while I waited for the wind to tell me what my coverage was. His experience and input made every scene better. By the second week, the entire crew had become so relaxed working together that we took half a day off on shoot days for the remainder of the lab. We were on Indian time, to say the least.

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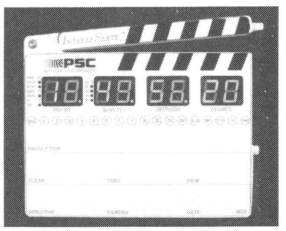

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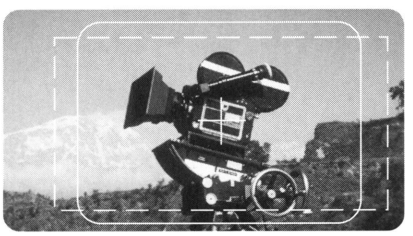

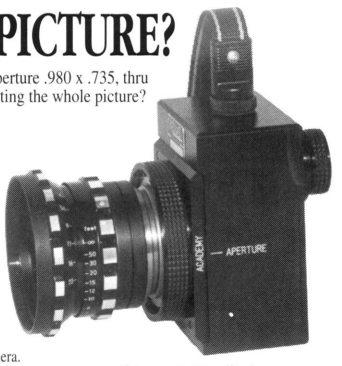

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The Filmmakers Lab resonates for me in a way that few experiences ever have. The feeling of community and support is something I'll never forget. I became a better storyteller there, met many gifted people, made some friends and cringed every time I saw the word Sundance printed on a coffee cup or a mounted buffalo head in one of the cabins. I would be a liar if I said it wasn't painful. It made my experience unforgettable in more ways than one. Schizophrenia intact, I thank you and no thanks.

Shawn Schepps, Filmmaker

When Michelle Satter called me and told me I had gotten into the director's program with my script "Kat and Allison Are Having a Bad Week," I freaked. I found myself telling my friends that I had somehow fooled everyone and there was no way that I was going to pull it off. But then I thought, screw the paranoid indulgence. So I took a deep breath and flew to Utah. I rented a green convertible Mustang at the airport and drove up the mountain, thinking maybe I'd finally get a tan. I didn't get a tan, as it turned out. I got an education instead.

At Sundance you get thrown in the water and you swim. You are encouraged to speak your mind and ask for what you need. I liked my peers. They were all talented, interesting people. I felt lucky.

My first day on the set I shot my master and hated it. I thought it looked like a Yuban commercial. I asked the director of photography to take the camera off the tripod and hold it. I discovered that I liked the fluidity of movement.

My crew and actors were totally professional. I realized that it was my job as a director to make them feel needed, appreciated and important. We played music and joked around between takes. It was a jamming set.

I decided not to be afraid of my advisors, which was hard. They were a heavyweight bunch, the best in their business. They all had wonderful tales to tell, although John Landis could engage an entire dinner table for hours. John Avildsen came into my editing room, sat back and taught me how to create a moment in a scene where none had existed. Lynzes Klingman had a beautiful smile and manner and was very technical about her editing. Stephen Goldblatt literally pulled me by the shoulders to show me a camera move. John Landis showed up on the set the day I had to block a fight scene and said, "Just tell me what you want to do, tell me what you want and I'll show you." He showed me how to film actresses Kyra Sedgwick and Jayne Brook beating the crap out of each other without ever touching. Redford drew storyboards for me. Morgan told me to get off my butt and start shooting something even if the table I wanted wasn't there.

I asked advisors to leave my set, I begged them to stay. I was in the mountains, it was beautiful, I felt blessed. If a scene didn't cut together, I felt cursed. One advisor told me at lunch that I could do a better job and had to push myself more. I burst into tears. But I learned. I learned. I learned. The pressure was on and the pace was fast but it was glorious. I was consumed by it. And when they showed our scenes in the big screening room and everyone applauded for everyone else, I thought, okay, I can do this. I can make words into pictures. They gave so much and only asked that I do my best. Two weeks later I walked out of there and I felt like I might someday be a filmmaker.

The deadline for applications to the 1995 June Filmmakers Lab is November 15, 1994 (postmarked no later than that date). For application forms, please send a SASE with 58 cents postage to the Sundance Institute, 225 Santa Monica Blvd., 8th Floor, Santa Monica, CA 90401.

Ali Baba and the Forty Thieves: A Romantic Fantasy in the Sand (Part 2)

Colorful pageant turned a tidy profit for Universal.

by Richard J. Schmidt

*In Part I (*AC *October '94), the writer examined the operatic and melodramatic underpinnings of the* Ali Baba *style. With these elements in place, all director Arthur Lubin needed was the right troupe of actors.*

The cast included Turhan Bey, who assumed the role of Jamiel after Sabu, for whom the role was written, was drafted for war service; Andy Devine, Fortunio Bonanova, Frank Puglia, and, as the young Ali, Scotty Beckett, who two years before had played the young Jon Hall in the 1941 Paramount effort *Aloma of the South Seas*. Yvette Duguay, who plays the young princess Amara, also appeared in *Aloma* as the young Dorothy Lamour. Montez, Bey, and Andy Devine were all "contract talent," meaning that they would receive their standard weekly paycheck for *Ali Baba*. According to the studio budget breakdown, contract talent cost Universal $43,233.38. The other actors, including Hall, Puglia, Kurt Katch, Bonanova, and Moroni Olsen, were "outside talent" on the budget summary, and were paid by the picture. They all would have come under the provisions of the Screen Actors Guild minimum contract, which guaranteed at

Having brought his daughter Amara (Maria Montez) from Basra, Cassim, Grand Vizier to the Khan, presents her to the Khan, hoping that he will take the girl as his wife, thus cementing Cassim's security in the court.

Near right: ***Director Arthur Lubin kneels to direct a scene and still towers over Angelo Rossitto, who plays a court-jester-like character. The Khan is played by Kurt Katch.***
Below right: ***Princess Amara languishes in the harem of the Mongol Khan.***

least one week's work and payment every Wednesday. Outside talent cost the studio $41,821.43.

Jon Hall, at age 30, was a well-known Hollywood leading man. Though six years past his best film, *The Hurricane,* he appeared in numerous action-adventure pictures, including the Universal film *Eagle Squadron*. He began his film career in 1935 under his own name, Charles Locher, and freelanced at Paramount and other studios before hitting it big in 1937. At the time of his death from a self-inflicted gunshot wound in 1979, he marketed his own anamorphic camera lenses.

Maria Montez (1920-1951) spent almost her entire American film career at Universal. Her career began in 1941 with bit roles in features such as *The Invisible Woman,* but she earned star status with her role as Scheherazade in *Arabian Nights*. When her career faded, she turned to European productions; director Lubin states that she was always prone to being overweight and that this contributed to her loss of popularity. She died of a heart attack at 31.

Also in the cast was Fred Cavens — long a fixture at Warner Bros., where he had previously taught fencing routines to Errol Flynn and Basil Rathbone in *The Adventures of Robin Hood* and to Flynn and Henry Daniell in *The Sea Hawk*. Here, cast as one of the 40 thieves, he was expected to design and work out fight choreography. In his previous films, Cavens utilized broad swords, sabers, and foils. In *Ali Baba* he would be required to use the curved and heavy Arabian scimitars while still maintaining the quickness and excitement characteristic of the Warner duels.

Involved with choreography of a different kind were dance directors Lester Horton and Paul Oscard. Horton, a Los Angeles dancer and teacher, had a reputation for balletic athleticism in his work, and had contributed to the ballet sequences in *Phantom* three months before. Oscard had previously done dance direction for another Arabian-themed film, *The Road to Morocco,* at Paramount. On *Ali Baba,* the two were responsible for arranging the dance of the mongol warriors which climaxed the picture and ended with the plunging of swords into 40 jars. The dance was photographed with much care, reflecting the meticulous approach of director of photography, George Robinson, ASC. The camera moves fluidly from close-up to high-angled top shots, dollying back and forth and building a sense of excitement with movement and changing image size. The script describes the action: "FULL SHOT — THE ENTRANCE DOORS as twin lines of semi-nude Mongol soldiers whirl out in a fantastic, bloodcurdling sword dance. They swing the great scimitars over their heads and leap about to the dissonant, cruel strains of music."

The cruel music, incidentally, was the work of Edward Ward. Ward (d. 1971) had started directing film music at least as early as 1929, and did 12

pictures for Universal between 1943 and 1945. He also wrote *Ali Baba*'s rousing bandit song, "Forty and One For All" (along with lyricist J.K. Brennan), and reprised it frequently for thematic emphasis. In keeping with operetta requirements, music is used heavily in *Ali Baba,* and there is hardly a frame of the film that is not scored.

The day before principal shooting began, a second unit, under the direction of Ray Taylor, took the 115-mile trek out to the Mojave desert to begin four days of action scenes at Red Rock Canyon. A startlingly beautiful movie "ranch," the Canyon was owned at the time by the Rudolph Hagen family, which rented the location to filmmakers for a use-fee.

This location work, shot by Harry Hallenberger, ASC, somewhat mirrors the location-

Jon Hall gets set for a big scene, his entry into Bagdad leading a mule train carrying 40 jars of "precious oils" to the Mongol Kahn. An assistant holds up the slate to key the scene as Mongols and citizens of Bagdad await their cues.

realism achieved in the Yuma-photographed desert scenes in *Arabian Nights*. The footage, which was shot with the huge rented Technicolor cameras ($80 per day), lifts the film considerably beyond studio limits, adding much excitement and action. Taylor (1888-1952) was a specialist in serials and low-budget Westerns, doing second-unit work on many A-films and directing first units in B-films up through 1949. About two-and-a-half minutes of his footage (maybe 20 setups) remain in the release print and include various ride-throughs, the chase scene between Andy Devine and the two guards (shot partly in Hagen Canyon), short scenes with Scotty Beckett and Maria Montez doubles, and the astonishing Ride of the Forty Thieves which begins before the Red Cliff's Preserve, a 285-foot blaze of sedimentary rock visible today off of State Highway 14. Universal's contract wrangler, Jimmy Phillips, worked with Taylor (and later Arthur Lubin) in dramatizing the action.

In reality, nearly all of these scenes were simply more Western footage (the thieves even hold their reins Western-style) dressed up to suggest the Middle East, but always in the form a Western audience could understand — and Taylor could deliver expertly. (Arthur Lubin, incidentally, does not remember consulting with Taylor on anything to be shot.) The 41 riders in the "Ride" scenes were each paid $11 a day, and certainly earned it during the summer in the heat of the Mojave; this compares to the $5.50 a day that the crowd extras earned back at Universal City.

Meanwhile, back at the Universal lot in North Hollywood, Maria Montez was becoming a problem. The Queen of Technicolor had strong opinions about how she was to be handled. According to Arthur Lubin, "Once in a while Maria got very temperamental. I remember once she was very late coming onto the set. She said that her wig wasn't ready and that her clothes weren't ready. I said, 'Maria, that's terrible; you're holding me up.' She looked at me and said, 'You, Arthur, are full of shit.' She tore her wig off and ran into the producer's office. I sent my assistant to see if he could get her back. And he came back laughing. He said 'You won't believe what the producer said: Cheer up Maria, all directors are full of shit.'"

Dialogue director Stacy Keach Sr. remembers, "Maria and Arthur fought and she began to take her direction from me. She wasn't talking to Arthur, so I acted as an intermediary between them. I had no problem with her. I'd talk to Arthur, then

relay it to Maria. It became part of my job."

Keach, father of the performer who has played Mike Hammer on television, was an actor himself, in addition to being a drama teacher and dialogue coach. The previous year he had been part of the Hitchcock company on the making of *Shadow of a Doubt*. He worked well with Arthur Lubin. "Arthur was a talented man," he says. "Fair, and liked by just about everyone."

Money was spent to create a lush and colorful pageant. While filming the "entrance into Baghdad" sequence on July 27, a huge menagerie of animals was rented for display on the backlot set: 30 horses (palominos, blacks, mongols, Arabians, etc.), 6 water buffaloes, 11 monkeys, 20 mules, 6 brahma bulls, 6 camels, 4 elephants, 4 macaws, 4 cockatoos, and 3 falcons.

Shooting wrapped on August 31, 1943, 13 days over schedule and $79,371.49 over direct cost as budgeted. The delays were attributable in part to Montez. Keach worked with her extensively on dramatic inflection and nuance, but Montez was not a quick study, and had difficulty mastering complicated dialogue. She leaned on Keach. Hartmann seemed aware of Montez's difficulty with her line delivery and acting skill and compensated in his writing. A review of the shooting script reveals that Princess Amara (Montez) nearly always had shorter lines than anyone she played off of, and this carried forward to the film itself. Certainly in her scenes with Hall, it is he, the second-billed (and lesser-paid) actor, who speaks the most words. Hall's lines include such gems as "By the beard of the Prophet — if I had a thousand pieces of gold I should offer it all for such a slave girl as you."

Of Montez, Lubin says simply, "She was not a good actress, but she was very photogenic."

Montez's character underwent a name change sometime between the writing of Hartmann's May draft and the shooting in June. She went from "Zura" in all 113 pages of the script to "Amara" in the film. Technical advisor Jamiel Hasson argued that Zura is not an Arab name, though Amara is.

The uncut footage was turned over to Russell Schoengarth, with $8,000 allotted for editing of the work print, cutting of the negative, and daily projection expenses. Sometime during this process, he excised the wraparound story that was part of Hartmann's original draft. Director Lubin thinks this was done to save time. The wraparound here was similar to the storyteller sequences in both *Arabian Nights* and *The Jungle Book* (1942), and so was becoming a convention of the color fantasy film. The sequence from *Ali Baba* began in the Baghdad bazaar, with a flute-playing fakir setting the background of the story.

After the sequence was trimmed, a superimposed title card was inserted at the conclusion of the opening credits to summarize the cut scene: "Baghdad — In the Days of the Mongol Invasions." The film then faded in on Scene #6 with the plundering of Baghdad and the introduction of our villain, the Hulagu Khan. The briefer and closing frame scenes were also omitted.

Postproduction included the color-correction done by the Technicolor lab itself. This was vital because the "dailies" seen each morning by the director, photographer, and producers had been printed only in black & white. The cost of printing off of the three-strip negatives, of registering and correcting them, was far too prohibitive to be done daily. The only color that Robinson saw prior to the rough cut had been a color frame or strip from each scene provided by the Technicolor people.

Additionally, John Fulton, ASC and his crew completed their visual effects work and Edward Ward added his score. The inserts photographed for the Ride of the Forty Thieves and cut into the Red Rock Canyon footage seem to have been hastily assembled. Jon Hall, Andy Devine, and Fortunio Bonanova were placed on mechanical horses before a process screen with Red Rock footage projected behind them. Clearly Hall does not know the lyric he is singing, and Devine and Bonanova (himself an operatic baritone who was seen in *Phantom*), though better, are still tentative and less robust than what the scene seems to call for. Some dramatic scenes were dubbed as well. Stacy Keach remembers that one of the actors recorded poorly because of a foreign accent. Despite attempts to correct the problem during shooting, Keach himself had to dub the actor's entire part in postproduction, though the actor himself was unaware of the change.

With this completed, Technicolor produced the final imbibition release prints.

The film's final price tag, which included studio overhead and cost overruns, amounted to $791,714.36, or $99,214.36 over budget. Thus, *Ali Baba* was not an inexpensive picture when most Universal films were, according to director Lubin, produced for under $250,000 (*The Phantom of the Opera*, released in August of 1943, came in at a reported $1,750,000). But "Maria's pictures," Lubin said, "made money. She was the money end, not Jon Hall."

Ali Baba and the Forty Thieves was released on January 14, 1944. In a pre-release review, *Variety* (1/7/44) called it "a winner." And though other reviews were not quite as glowing, Universal Pictures clearly had another first-run hit on their hands. The picture's success contributed to Universal's $3.4 million after-tax profit for the year, the studio's second-best margin of the previous 12 years. (Paramount Pictures produced 1944's largest film studio profit of $14.7 million, but they also won 10 Academy Awards that year compared to Universal's one — and that sole award was a class III technical award.)

Ali (Jon Hall) stands before the throne of Hulagu Khan with other gift-bearing merchants and princes, while Mongol swordsman (Paul Oscard Ballet) do a scimitar dance. In the background are the Ali's gift to the Khan, oil jars in which the Khan hopes to trap Ali's men.

So Maria Montez and Jon Hall, their best film together now behind them, would soon begin the next picture in their money-making series, *Cobra Woman.*

Credits

A Universal Pictures *production. Produced by* Paul Malvern; *executive producer* Jack J. Gross; *directed by* Arthur Lubin; *original screenplay by* Edmund L. Hartmann *based on* A Thousand and One Nights; *director of photography,* George Robinson, ASC; *associate,* W. Howard Greene, ASC; *art director,* John B. Goodman; *associate art director,* Richard H. Reidel; *set decorators,* R.A. Gausman, Ira S. Webb; *Technicolor staff,* Natalie Kalmus, William Fritzsche; *musical score,* Edward Ward; *lyrics,* J. K. Brennan; *sound direction,* Bernard B. Brown; *sound technician,* Robert Pritchard; *makeup,* Jack P. Pierce; *costumes,* Vera West; *film editor,* Russell Schoengarth; *special photography,* John P. Fulton, ASC; *dance directors,* Paul Oscard, Lester Horton; *script clerk,* Evelyn Bostock; *first assistant director,* Charles Gould; *second assistant director,* Jud Cox; *dialogue director,* Stacy Keach; *technical advisor,* Jamiel Hasson; *fencing master,* Fred Cavens; *wrangler,* Jimmy Phillips; *prop man,* Blackie Rosenkrantz; *unit managers,* Morrie Weiner, Edward Dodds; *second-unit director,* Ray Taylor; *second-unit cinematography,* Harry Hallenberger, ASC; *second-unit assistant directors,* Fred Frank, Ralph Slosser; *second-unit script clerk,* Joe Kenny; *Western Electric recording; running time 87 minutes; released January 14, 1944.*

Princess Amara, Maria Montez; *Ali Baba,* Jon Hall; *Jamiel,* Turhan Bey; *Abdullah,* Andy Devine; *Hulagu Khan,* Kurt Katch; *Prince Cassim,* Frank Puglia; *Baba,* Fortunio Bonanova; *Caliph,* Moroni Olson; *Nalu,* Ramsay Ames; *Fat thief,* Chris-Pin Martin; *Young Ali,* Scotty Beckett; *Young Amara,* Yvette Duguay; *Mongol captain,* Noel Cravat; *Little thief,* Jimmy Conlon; *Mahmoud,* Harry Cording; *Thieves,* David Heywood, Hans Herbert, Ethan Laidlaw, Dick Dickinson, Joey Ray, Pedro Regas, Fred Cavens, John Calvert; *Dancers (Paul Oscard Ballet),* Eric Braunsteiner, Jerome Andrews, Alex Goudovitch, Ed Brown, George Martin, Dick D'Arcy; *Arab major-domo,* Rex Evans; *Nursemaid,* Belle Mitchell; *Mongol guard,* Harry Woods; *Tailor,* Alphonse Berg; *Barber,* Charles Wagenheim; *Arab giant,* Wee Willie Davis; *Guard,* Norman Willis; *Mongol captain,* Robert Barron; *Mongol guard,* Dick Alexander; *Persian prince,* James Khan; *Guards,* Pierce Lyden, Don McGill; *Mongol guard,* Art Miles; *High priest,* Theodore Tabor Patay; *Arab dwarf,* Angelo Rossetto; *Tama, Prince of Cawnpore,* Stewart East; *Palace guard,* Carl Sepulveda; *Handmaidens,* Margaret Zane, Thelma Haven, Karen Knight, Geraldine Fisette; *Princess Kanza Omar,* Alma Pappas; *Paulita Arvizu,* Betty Lorraine.

The author would like to thank park rangers Craig Mattson and Mark Faull of the Department of Parks and Recreation for their tour of Red Rock Canyon. Archival material was viewed at the special collections department of USC and the Margaret Herrick Library at the AMPAS. Interviews with Arthur Lubin were conducted in 1987 and 1992; with Stacy Keach Sr. in December of 1992 and July of 1993, and with Martin Obzina in September of 1990. The film script was Jon Hall's personal copy and is in a private collection. In inscribing the script to a friend, Hall wrote, "This was the best one."

New Products

compiled by Marji Rhea

Color CCD Assist with Time Code

Aaton's VR46 Color CCD Assist for their 16mm XTRplus and XTRprod cameras provides flicker-free color images, programmable burn-in windows, an electronic frame generator, and VITC time code insertion in one video assist package. The VR46 (PAL and NTSC) systems receive AatonCode information directly from the Aaton camera body. The NTSC version of the assist includes a frame store for operation at 24fps.

Aaton has devised this system to provide high-quality CCD assist imaging for direct digital recording on non-linear editing machines with VITC insertion and/or moveable timecode windows for accurate reference back to the negative.

The VR46 incorporates three-line VITC technology to record both continuous ascending video time code and time of day, date and film camera number. A white line identifier is used to control VTR recording on/off through the video signal itself. Burn-in windows are available for time of day, date, production ID and film camera number. The VR46 can be fitted onto any existing XTRplus or XTRprod camera.

For information: Aaton USA, 4110 W. Magnolia Blvd., Burbank, CA 91505, (818) 972-9078, FAX (818) 972-2673.

Color Video Capture Boards for Macs

Precision Digital Images' IMAXX Standard Color (SC) board performs precise color video capture for Macintosh and Quadra platforms, designed for digitizing up to 24-bit color.

The IMAXX SC can perform accelerated color space conversion to RGB 24bpp, 16bpp or 8bpp pseudo color and provides internal clocking. High-performance color capture is enhanced through hardware and user-controlled software features that allow precise adjustment of the board electronics to ensure optimum image fidelity. As a member of the IMAXX family, the SC also performs block mode transfers for high-speed capture, supports bus mastering for increased system performance, and has expandable frame memory. The SC comes with PDI's MAXXGrab application software and MAXXima application programming interface.

With user-friendly pull-down menu selections, MAXXGrab software allows control over a number of video input signals and key display attributes such as brightness, contrast, saturation and tint.

A Photoshop plug-in lets users acquire images directly from N.I.H. Image, a powerful data visualization program for the Macintosh, and Adobe's highly acclaimed Photoshop image processing software. The availability of a Photoshop plug-in also provides support for other third-party software.

The IMAXX SC captures analog video and is designed for Apple Macintosh, Power Macintosh and Quadra computers. The SC will interface to a wide array of video sources using multiple input connections, and will support industry-standard input signals and color models. Supported signals include NTSC, RGB and SVHS.

For information: Pacific Digital Images Corporation, 8711 148th Avenue NE., Redmond, WA 98052, (206) 882-0218, FAX (206) 867-9177.

Image Media Manager

Viewgraphics' Viewstore 6000 Image Media Manager is a resolution independent digital imaging system that provides computer workstations with access to real-time, full-motion super high-resolution digital imagery. It allows television research and film production professionals to analyze full-motion imagery interactively at progressive scan resolutions up to 2000 pixels, more than ten times the resolution of standard video.

The Viewstore 6000 also provides high-performance capability for film and video postproduction. When combined with computer graphics servers and online storage facilities, the Viewstore 6000 allows high-resolution electronic screening of work in progress, thus dramatically shortening the produc-

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The offset pl-mount makes it easy for you to switch from standard 16mm to Super 16mm in the field. SMPTE time code and flicker-reduced CCD video are integral to the 16SR 3's design, allowing you access to the latest in electronic post-production. Many of the new electronic features of the Arriflex 535, such as programmable on-board speed changes are included, giving you more creative options than ever before.

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When you spend all day looking through a viewfinder, you deserve the best working conditions possible. Your eyes will appreciate the brighter finder image and the two-time magnifier built into the extender for critical focus adjustments. Warning indications in the finder for asynchronous speed and battery status are displayed instantly.
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tion cycle. The system also offers high-speed interfaces and features such as interactive zoom, scroll and windowing.

HDTV developers using Viewstore technology can quickly identify anomalies in test sequences which allows them to refine their work rapidly. The system is also designed for users involved in a variety of other applications such as image compression, multimedia, satellite image analysis, and medical imaging.

Video output is programmable to any resolution up to a 360 MHz pixel rate including super-high-resolution 2K X 2K. The system can store any resolution RGB or 4:2:2 format digital imagery, with support for both eight and ten bits. File import facilities include all popular formats. With up to six gigabytes of storage, the Viewstore 6000 holds one full minute of high-definition video or over five minutes of broadcast-quality video. Image media stored in the Viewstore 6000 memory is mapped to windows on the display. Motion sequences are played in the windows, and the Viewstore 6000 can zoom up to 8X and pan around to inspect the imagery even while playing.

A graphical user interface provides an interactive visual representation of the display. Windows are easily moved and resized. Control buttons similar to a professional video tape recorder yield quick precise motion control. User interfaces can also take advantage of the power of X-Windows on the Viewstore 6000 display.

The Viewstore 6000 connects directly to the following computer interfaces: HiPPI, GIO, VME, EISA, and Sbus, which connect to digital tape recorders through standard interfaces; and SMPTE 125M (D-1) and SMPTE 260M (HD). The optional V-LAN controller provides frame-accurate editing between the Viewstore and the VTR. Stored sequence duration is increased by keeping data in compact YUV (422) format and converting on the fly to RGB. Also, HD and D-1 video can be monitored during capture on the RGB display.

Users can backup and restore resolution-independent image data using D-1 digital videotape equipment. All resolutions of imaging media are archived to D-1 at rates about one hundred times faster than traditional computer tape backup, and tape produced by this process holds up to 120 gigabytes of data.

For information: Viewgraphics, 1340 Space Park Way, Mountain View, CA 94043, (415) 903-4900, FAX (415) 969-6388.

Laptop Camera Controller for Arris

Arriflex Corporation's LCC Laptop Camera Controller controls camera functions, maintains a database of camera status information, does film accounting and prints camera reports. It is designed to control the Arri 535 and 16SR-3 cameras and operates on any System 7 or later Macintosh Powerbook.

Used with the 535, the LCC will auto-calculate the shutter opening to provide constant exposure based on given speeds. When using the 16SR-3 or 535, the LCC can be linked to the Arri ICU Iris Control Unit to achieve complete lens exposure compensation.

The LCC can regulate camera operating functions, reset film counters and log time code in and out points. Its frame-accurate Go To feature, which runs the camera forward or reverse to any chosen frame, makes the LCC valuable for multi-pass photography.

Arri 535 and 16SR-3 cameras send status info directly to the LCC, including frame rate, shutter angle, battery voltage, exposed and remaining footage counts, time code status and count, user bits, gate filter choice, and format selected for ArriGlow frame lines in the viewfinder. The LCC displays this data and uses it to update its camera report. Information can also be entered manually, to allow the use of the LCC's database and reporting capabilities on projects shot with other cameras.

The LCC can print the Camera Report, including script supervisor comments, notes to the lab, or any remarks relating to a specific shot. Also, the LCC can log all film received, exposed and sent to the lab during production, and print Received Raw Stock, Available Raw Stock and Exposed Film logs.

The LCC package includes software, Mac-to-camera connecting cables, and a user's manual.

For information: Arriflex Corp., 617 Route 303, Blauvelt, NY 10913-1123, (914) 353-1400, FAX (914) 425-1250; or 600 N. Victory Blvd., Burbank, CA 91502-1639, (818) 841-7070, FAX (818) 848-4028.

Tabletop Shooting Lift

Innovision's Lift is a new component of the company's Mini-Mover system of motion-control products, and offers 18" of vertical travel for a variety of tabletop motion control applications. The Lift's micro-stepping motor provides variable speeds of up to 4" per second. With a weight capacity of up to 60 pounds, the Lift can be used to precisely manipulate either the camera or the subject.

The Mini-Mover systems transports objects backwards and forwards, side to side, up and down, and in rotation. The camera can also be moved inside, around, or through larger objects. Dual joysticks provide smooth and accurate movement via the Brain Controller. The joysticks offer up to four axes of movement simultaneously. Complex actions of up to ten minutes duration are stored in the Brain Controller for precise repetition. Speed and ramp time are fully adjustable.

For information: Innovision Optics, 1318 2nd St., Suite 31, Santa Monica, CA 90401, (310) 394-5510.

Technical Manuals

Available from Focal Press is the *Dictionary of Image Technology*, which has been completely rewritten since the previous 1988 edition. The book was compiled by a team of British Kinematograph Sound and Television Society members.

The Art of Digital Video, Second Edition, has also been revised to include new material on transform coding for data reduction and motion estimation; advanced PAL decoding; 16:9; signature analysis; noise shaping audio converters; and an introduction to new DVTR formats.

For information: Focal Press, 313 Washington St., Newton, MA 02158-1626, (617) 928-2500, FAX (800) 446-6250.

Video Editing System Update

New features of TouchVision's Version 2.2 of D/Vision - Pro digital video editing system for the PC include compositing and motion control effects, auto-batch digitizing with machine control, film cutting lists, importing and ed-

iting of AVI files, improved online EDLs, and improved graphics quality. Pro features professional online EDLs, 3-D text, graphics and animation, six channels of 44.1 KHz audio, support of up to 100 hours of instantly accessible video, and support of PAL and NTSC video in and out.

Effects such as compositing, keying, flips, stutters and variable speed motion control are now possible with the new version. Up to five overlapping layers of motion video, graphics, or animation can be scaled and composited with varying transparency and key levels, and slow, fast, or reverse motion can be created by simply keying in the desired speed.

Version 2.2 is also being distributed on CD-ROM with CrystalGraphics' Flying Fonts Plus, a 3-D titling, modeling and animation tool for creating texture-mapped titles, logo treatments, and other graphics which can be animated in 3-D. Both stills and animation can then be exported to D/Vision and edited into programs or overlaid onto live video.

For information: TouchVision Systems, 8755 W. Higgins Rd., Suite 200, Chicago, IL 60631, (312) 714-1400, FAX (312) 714-1405.

Flying Film Systems

Aerobatic Film Systems has two new Fixed Wing Camera Platforms. The large cabin, twin-engine aircraft has a speed range from 70 to 200 mph. The nose mount will accommodate almost all wide format cameras and high definition TV equipment. Complete remote control for tilt and all camera and lens control functions is accomplished from a workstation inside the cabin along with recording and video monitoring for the director. The entrance door and/or emergency wing exit can be removed for side or back-looking shots.

The Pitts S-2B aerobatic camera platform is mounted on a Pitts Bi-Wing aerobatic aircraft, which has a speed range of 90 to 180 mph. The platform accepts a wide variety of 16mm, 35mm and 65mm film and video cameras and employs electronic systems with remote controls for iris, camera speed and video playback.

For information: Corporate Air Parts, Aerobatic Film Systems, 6920 Hayvenhurst Ave., Suite 202, Van Nuys, CA 91406, (818) 997-0512, FAX (818)

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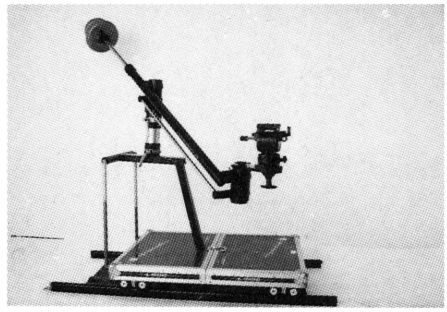

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3-D Animation Update

CystalGraphics' update to its Topas PC-based software for creating broadcast-quality 3-D animations features more than 1400 pre-defined motion paths, a selection of pre-set bevels, and a simplified method for integrating Topas-generated 3-D animations with existing video footage.

Animated Match Perspective, a new feature, allows users to realistically integrate their 3-D animated creations with video footage. Models such as buildings or characters can reflect proper perspective, lighting, and shadowing when placed in pre-existing video clips. Previously, this effect required the video to have been shot with a $100,000 motion-controlled camera system, an impractical solution for most PC users. With Animated Match Perspective, creative professionals can have Hollywood-type effects for less than $2,500.

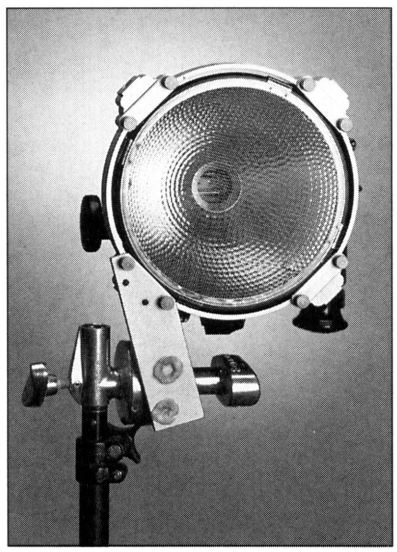
The new bevel command allows users to visually select from a collection of 15 pre-defined faceted and curved bevel styles. Custom bevels can also be created. With the 1400 pre-defined motion paths supplied, smooth fly-in or fly-out motions can be assigned to objects or groups with a single command.

For information: CrystalGraphics, Inc., 3110 Patrick Henry Dr., Santa Clara, CA 95054, (800) 979-3535, FAX (408) 496-0970.

Universal Camera Mount

The Universal Camera Mount, now available from Whitehouse Audio Visual, is a handheld device that allows the operator to produce pans, tilts, rolls, tracking and crane shots with ease and precision. Made of lightweight, anodized aluminum, the mount features a U-shaped cradle equipped with a sliding base plate. Infinite balance adjustment (both fore-and-aft and side-to-side) accommodates cameras ranging from miniature Hi-8 camcorders to full-featured, handheld 35mm film models. Two padded handgrips attach to the arms of the cradle by gimbal-style joints for ultra-smooth movement on two axes. Handgrip height is adjustable so that the unit's center of gravity can be kept low despite a wide range of camera profiles.

For information: Whitehouse Audio Visual, 2696 Lavery Court, #8, Newbury Park, CA 91320, (805) 498-4177, FAX (805) 499-7947.



Lightbank Mounts

Chimera's 3770AL bracket is an alternative method for mounting a light, lightbank and speed ring to a stand or boom. It eliminates the need for a stand adapter on the light fixture. The bracket mounts to any of the company's 6.0 or 7.3 aluminum rings, including the 9500AL (Lowell DP) and 2930AL (Lowell Omni). You can then use a 2 1/2" grip head and the 3770AL bracket with any lightstand or boom with a standard 5/8" stud.

Chimera has also designed two new mounts for its Micro Lightbank System. There are now Micro kits to adapt 11 different on-camera light units to the lightbank to achieve a soft, broad source. The Micro lightbank has a front screen that measures five by eight inches. The speed rings are manufactured from 6061 T6 alloy and then black anodized. The Micro was designed for the ENG and EFP cameraman to create a soft diffused look when using on-camera lighting. It can also be used as an eyelight for film production.

For information: Chimera Photographic Lighting, 1812 Valtec Lane, Boulder, CO 80301, (800) 424-4075.

Tripod Line

H. Wilson's tripods are crafted out of lightweight, heavy-duty aluminum and feature fluid heads with bubble levels. They can be used with both video and photography cameras. Convenient lateral leg locks and an adjustable locking neck make for quick setup and easy breakdown. The WT8000 is equipped with easy sliding tilt and pan adjustments controlled by separate vertical and horizontal fluid friction controls, making it simple for the camera buff to capture that perfect shot. Its double leg setup allows for superior endurance and longevity, and its oversized feet are height-adjustable.

For information: H. Wilson Co., 555 West Taft Drive, South Holland, IL 60473-2071, (800) 245-7224, FAX (800) 245-8224.

Lighting Manual

Ross Lowell's book, *Matters of Light & Depth, Creating Memorable Images for Video, Film and Stills Through Lighting*, covers exploiting and controlling glare, motivating light, making transparent and translucent subjects glow, and lighting for movement. Lowell also discusses how to set up a small studio and how to perform light surgery on large ears, bald heads, thin faces and thick eyeglasses.

The book features techniques, theories, tips and philosophy for all types of lights, and draws upon the words and images of many distinguished cinematographers, photographers, lighting directors and artists to help explore lighting and composition in new ways.

For information: Broad Street Books, P.O. Box 12983, Commerce Station, Philadelphia, PA 19101, (215) 551-0605.

Map Graphics Products Online

Magellan Geographix has made commercially available its MGDigitalAtlas, MGCartographer, and MGExplorer digital map graphics products.

MGDigitalAtlas'1000+ color maps allow the user to create custom maps in minutes, and are complete, up-to-date, and cartographically accurate. Each map file contains between 10 and 100 layers of geographic information that can be used as is or modified to highlight the customer's primary areas of interest. Map coverage areas include world, regional, continents, countries, and great cities of the world. All of the digital map files are available in the most popular graphic file formats, allowing users to

modify and print maps from within their existing graphics and desktop publishing applications.

Magellan Geographix is also available on CompuServe, which is offering a monthly series of five Geographix digital maps to its members as part of their basic service, as well as access to over 500 GIF maps from the MGDigitalAtlas collection of maps. CompuServe members will also have access to hundreds of current and cartographically accurate digital maps in Aldus Freehand format when they access the "Go Magellan" forum.

Magellan also offers MGExplorer and MGCartographer services for making custom-made maps.

For information: Magellan Geographix, 6464 Hollister Ave., Santa Barbara, CA 93117, (800) 929-4627, FAX (805) 685-3330.

Panther Products

Panther's Super Panther III crane features an enhanced quietness and double column speed. The unit has more power and individually adjustable start and stop ramps. The software automatically adjusts to one of 48 ramps after the speed is set. New snap-on batteries have a charge display and an outlet for a camera. The Kombi-Wheels have a foot-operated kombi-brake for both track and studio wheels.

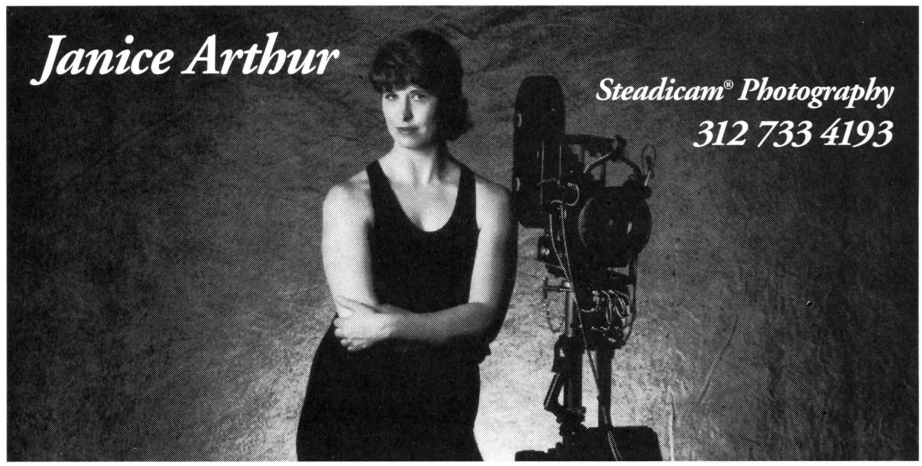
The company's Super Jib II can carry both camera operator and assistant on an adjustable platform, and features an increased lift range. The dolly's handset control now allows for smooth programmed crane shots in a 360-degree range. The rear part can be taken off for tight shoots.

Panther's Precision Vario Tracks are modern profile tracks for dolly and crane shots. The tracks require less underlay material and are easier to install and are especially useful where the ground is soft and when heavy dollies or cranes are used. The runners are adjustable and can be used for all guages.

For information: Panther GmbH, Munich, (89) 613 1007, FAX (89) 613 1000.

Time Code Monitor

Summertone Ltd.'s Time Code Monitor can now simultaneously monitor, analyze and report errors in vertical interval time code (VITC) as well. The



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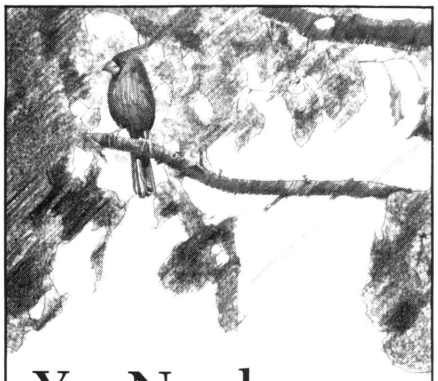

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Fiber-optic Lighting

Innovision Optics' Lumenyte fiber-optic lighting equipped with the Quiet Lightning xenon metal halide Illuminator. The light source delivers four times as much light to the fiber-optic cable as its predecessor, due in part to Quiet Lightning's square wave technology.

Lumenyte resembles a flexible neon rope and provides illumination from either end or by glowing evenly along its length. The illuminaor draws ½ amp of power and is silent.

For information: Innovision Optics, 1318 Second St., Suite 31, Santa Monica, CA 90401, (310) 394-5510.

Video Acceleration Software

miro Computer Products' miroCrystal 10TD and 20TD are digital video and graphics acceleration products for Microsoft Windows that feature the Tseng Labs W32p graphics processor and Viper video co-processor. The TD series also includes an on-board television tuner to view TV broadcasts onscreen. The company also provides capture capability and video editing software with the TD series.

The TD series deliver significantly enhanced digital video playback capabilities over standard graphics boards and allows users to display full-motion video at resolutions as high as 1024 X 768 in 16-bit color. This is accomplished with the onboard video processor that performs image interpolation in real time to provide high-quality, scalable video without the pixillated and jerky images normally associated with enlarging a digital video window across a computer display.

The company's miroCrystal 20PV and 40PV video provides enhanced digital video playback, accelerated graphics and digital video capture for Windows PCs. Also available is miroSound PCM1 pro, an advanced 16-bit stereo sound card offering features such as the new Yamaha OPL4 wavetable synthesizer chip, 128 instrument samples and simultaneous recording and playback capability.

For information: miro Computer Products, (415) 855-0940.

Effects Upgrades

Wavefront has added new features to its updates of its Kinemation Advanced and Dynamation Character Animation Systems, and Explore Animation System.

Kinemation 2.0 now has a true 3-D collision model to facilitate automatic interaction between characters and their environments. The systems also allows animators to cut and paste skeletons, bodies and motions between different characters and offers a graph editor and real-time playback tool to facilitate subtle editing and modifications.

New features of Dynamation 2.0 include inertial elements to make objects bounce, wobble and quiver under the influence of inertia, welding forces for attaching objects such as seams of synthetic clothing, and enhanced collision and spring models. The system also has an all-new interface, tutorials, manual, online help and library of ready-to-use Clip F/X.

Explore 4.0 is now fully interoperable with the company's entire suite of special-purpose product modules. New modeling features focus on building geometry optimized for animation. These include an interactive sculpting capability as well as a powerful implicit surfact (metaballs) option. A new ShaderMaker module has been added to allow graphical creation and control of the most detailed shaders. The new Dispatcher automatically distributes and administers complex rendering jobs across a network of SGI workstations.

For information: Wavefront Technologies, (805) 962-8117, FAX (805) 963-0410.

Tom and Viv Turns Heads at 18th World Film Festival in Montreal

by Brooke Comer

Last September's 18th World Film Festival of Montreal attracted a record number of filmmakers from around the globe, establishing the Festival's importance on the circuit. "The thrill and power of cinema is never more evident than at festivals such as this, which bring us the best the world has to offer," said Michel Dupuy, Minister of Canadian Heritage.

Directors are traditionally credited with instilling that "thrill and power," but at this year's Festival, director Brian Gilbert (*Vice Versa, Not Without My Daughter*) shared the accolades for his much-talked-about film *Tom & Viv* with producer Peter Samuelson and director of photography Martin Fuhrer (whose credits include *Nanou, Lord of the Flies*, and *Last of His Tribe*, for which he received a Cable ACE Award).

Starring Miranda Richardson and Willem Dafoe, *Tom and Viv* is the true story of poet T.S. Eliot and his first wife, Vivienne. Vivienne suffered from a hormonal imbalance, and the medication she received often caused mood swings and erratic behavior. When Eliot's career launched him into the limelight, Vivienne's outbursts became public embarrassments. Today, she might be diagnosed with severe PMS. But at the time, treatment for women's complaints was lacking and Eliot exercised his male prerogative by having his heiress wife committed to an asylum.

Gilbert was intrigued by the story's premise: "This is the story of a certain kind of love which you don't often see these days. We've become very tender in our idea of what love ought to be. Often it does involve very violent feelings. But despite disturbed psychological states, there can still be an amazingly deep bond. That's what's fascinating about this relationship. Plus, the fact that T.S. Eliot is a famous poet humanizes the subject."

But the material also presented Gilbert with a big challenge. "I had a certain resistance to a story set in England in the Twenties. It's not easy to bring fresh emotion to such a well-furrowed area. It was truly a period film," he says, chuckling at the double entendre. "I didn't want to court cliché. I was determined not to treat it as a costume drama."

Gilbert solved the dilemma via artistic and technical means; he dug beneath the surface of the story to bring out the human perspective, and he and Samuelson chose to shoot on Super 35, "which gives a more contemporary feeling. Super 35 does cost less, though it's not really economical when you consider the postproduction process."

Listing the other advantages of the format, he cites spherical lenses, "which have a great depth of field for the same width of shot," as well as the fact that Super 35 offers maximum flexibility for venues of the future, "since you're using the whole negative area and a little more."

Tom & Viv also employed a system called Common Headroom, whereby the tops of the actors' heads are placed in the same spot for all formats by the operator. Says Samuelson, "The result is obvious: you don't have much headroom on TV. You have excess room at the bottom versus the top of the frame. Also, the video versions are high-quality because Brian wanted to make the film in a 2.35:1 ratio."

Samuelson also believes that the 2.35 to one ratio has another unsung bonus: better quality audio. "If you're shooting a two-shot for a given width , the headroom is less and you can have the mike closer to the actor's mouths. We'd have had to pan and scan to adapt the 1.33:1 ratio for television, whereas this way, we don't. We have all our ducks in a row, and if someone invents a new format, we're ready."

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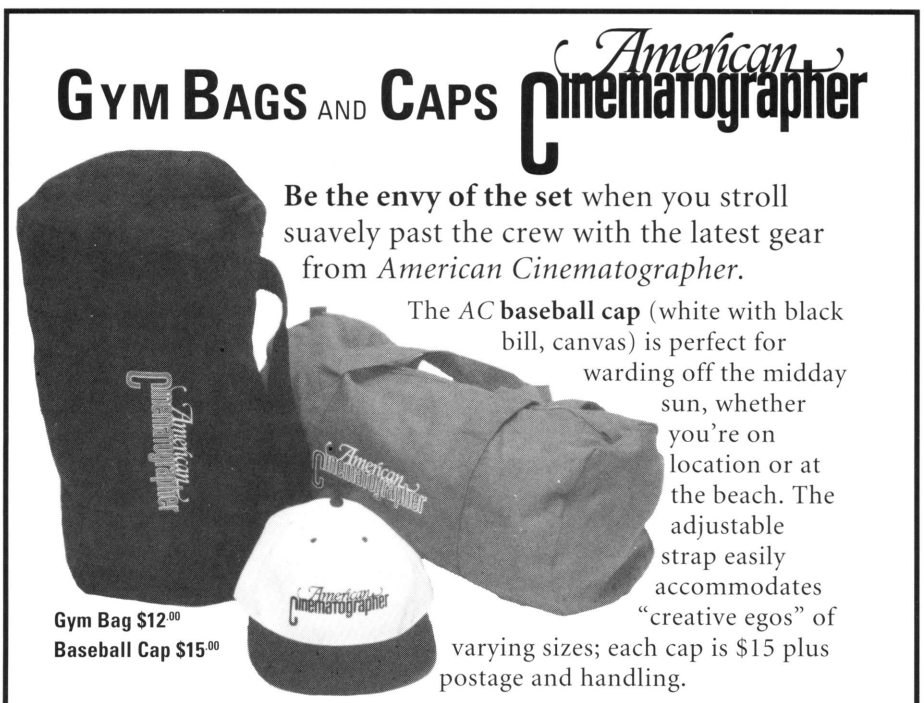
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Gilbert wanted to make sure *Tom & Viv* had a wide-screen feel, and spoke to editor Tony Lawson to make sure the intimate scenes wouldn't get lost. "He made me realize it's a fallacy that wide-screen is a spectacle-only medium, driven by action-adventure themes. Tony told me that the framing for those two-shots would be even better on a wide screen. You can really maximize the intensity of a relationship in wide-screen, which is a big advantage in a drama of this sort.

"I used a long lens to bring the film into the present, and I also wanted a shallower depth of field without putting everything out of focus and without using diffusion." Instead, Gilbert worked with Fuhrer to get an "impressionist" feeling via the use of dappled lighting.

Gilbert was a student when he first worked with Fuhrer, and had tried to get the Swiss-German cinematographer to work with him on previous projects. "It was hard for him to work in the U.K.," Gilbert explains. "But I finally got him, and I am convinced that he's going to be a very significant cinematographer."

The director/cinematographer collaboration was a close one. "Martin came into preproduction much earlier than usual to discuss lighting, scout locations, and work with production designer Jamie Leonard and costume designer Phoebe De Gaye," Gilbert relates. Leonard made collages of each scene, with wallpaper samples and furniture, so that every color was mapped out. Then De Gaye could create her costumes with a backdrop in mind.

"We'd often play against the mood of a scene with regard to look and color," explains Gilbert. In very sad scenes, he was careful not to reinforce the mood with a gloomy look. "When you're sad, a bright, sunny day will make you even sadder," he notes. Gilbert also got a lot of his aesthetic ideas from paintings. "I looked at British art influenced by the Impressionists."

There is speculation that Viv wrote more than small parts of Eliot's poems, but the film does not argue this case. "Marriage is marriage," says Gilbert. "No one's claiming Viv wrote Eliot's *The Wasteland*. But there was a close human bond, which has not been unearthed until now. And it must be considered. That's why we made this movie."

Books in Review

by George Turner

Hollywood TV
The Studio System in the Fifties
by Christopher Anderson
University of Texas Press, 240 pps., paper $19.95, cloth $45

Anderson takes us back to the late 1940s when most of us were gazing as though hypnotized at anything that appeared on those tiny, rounded screens mounted in big cabinets. This threat to the supremacy of the theatrical film as America's favorite entertainment stirred consternation in the Hollywood studios, which already were in the throes of a post-World War II economic slump. Meantime Uncle Sam administered what almost amounted to the *coup de grace* in 1948, when the Supreme Court demanded the divorcement of major studios from their theater chains. It was the possession of theater circuits that separated the major studios from the minors.

The movie industry was bitter. The major companies refused to lease their product to TV, and for a time the slickest shows on TV were 1930s movies from Poverty Row companies such as Monogram and Chesterfield and old "quota quickies" from England. Film people thrown out of work by postwar layoffs faced blacklisting if their credits or mugs appeared on TV.

The movie executives seemed almost gentle compared to some of their opposite numbers at the networks. As TV improved and began spreading to the hinterlands in the early 1950s the inevitable happened: the hard-boiled leaders of the broadcasting industry and the tough-minded moguls of Hollywood gradually brought their hard noses together for mutual self-preservation. There, too, were the independents born in the age of television, such as Jerry Fairbanks, Revue, Grant-Realm, Four Star, Mark VII, Ziv, Desilu, Dougfair(banks), Snader, etc.

Such is the background of this interesting period of caste, clashing egos, and reluctant integration. Today it's hard to imagine what TV would be like without the work done by or at Universal, Paramount, Disney, Columbia or Twentieth Century Fox.

Anderson explains it all very well, emphasizing Warner Bros.' entry into the field and David O. Selznick's making of *Light's Diamond Jubilee* as a television special. The use of archival materials from Selznick and Warner provides many surprises and much insight. The author went into a lot of previously uncharted territory to illuminate this important but little-known segment of entertainment history and the result is a fascinating piece of work.

Early American Cinema
by Anthony Slide
Scarecrow, 308 pps.
cloth, $39.50; paper, $24.50

One writer who possesses the special insight necessary to any intelligent discussion of the silent movie is Slide, whose writings on the subject over the past 30 years mirror his knowledge and love of an art no longer widely understood or appreciated. This newly revised — in fact, completely rewritten — edition of a landmark work originally published in 1970 offers a compact history of pre-1920 American filmmaking with about as much information as can be crammed into a single volume.

It's remarkable, in fact, that considerable attention is given to such oft-slighted subjects as studios, cinematographers, music scoring, serials, lighting equipment, early cameras and projectors, the introduction of narrow-gauge films for non-theatrical use, the rise of serious recognition of films, hand coloring, primitive color photography, production design, titling, etc. A concise history of the Motion Picture Patents Company covers that touchy subject very well. All

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this is accomplished without neglecting the usual centerpieces of silent movie books: Edison, Biograph, directors (with maybe a slight overdose of Griffith and Ince), and stars.

There are good textbooks on early cinema and there are film books that are pleasant to read — the twain don't always meet. Here they are combined neatly.

Jean Renoir:
Projections of Paradise
by Ronald Bergan
Overlook Press, 378 pps., cloth, $23.95

Orson Welles called Jean Renoir "the greatest of all directors." Many books and a large volume of articles have been written about him. This year being the centenary of Renoir's birth, posthumous honors are proliferating: a Cannes Film Festival dedication, a BBC documentary and the renaming of a street in Paris for him. Another homage is this book by a British writer with the participation of Renoir's son and many of his associates.

Basically a biography, this study also looks into the director's *modus operandi* and appraises each of his films. Some of the pictures he made in France are given their due as classics: *La Chienne, Les Bas-Fonds, La Grande Illusion, Le Regle du Jeu, La Bete Humaine* as well as the Anglo-Indian production, *The River.* Bergan delivers a fine word picture of Renoir and his work.

Renoir's discomfiture while he was working in Hollywood during World War II is told once more. One naturally sympathizes with him for being unable to cope with the studio system after years of working in his own way. After Zanuck refused to let him make *Swamp Water* on location in Georgia, Renoir told Dudley Nichols, "I would rather sell peanuts in Mexico than make films for Fox." Making *This Land is Mine* and *Woman on the Beach* at RKO also appalled him. Two American films Renoir made with minimal interference are treated more sympathetically. Good, for *The Southerner* is as valid a piece of Americana as *The Grapes of Wrath*, and *Diary of a Chambermaid* is a classic to rank with the best of the French films.

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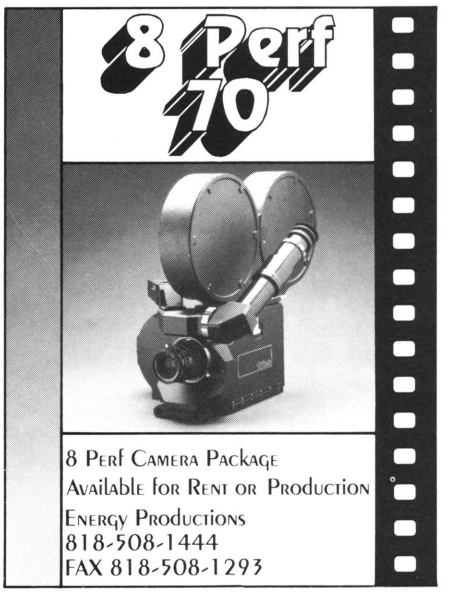

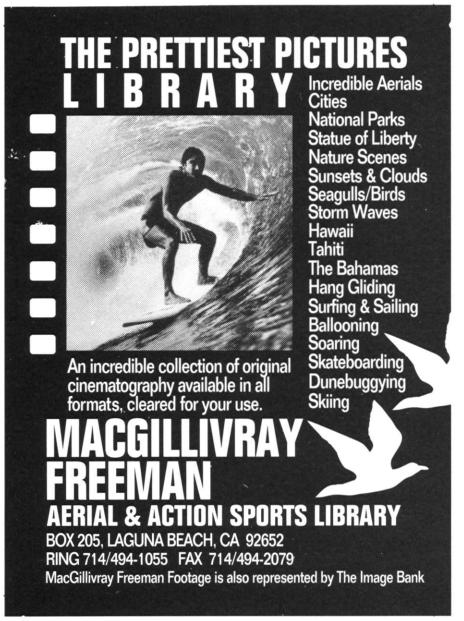

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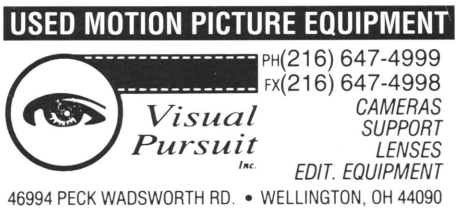

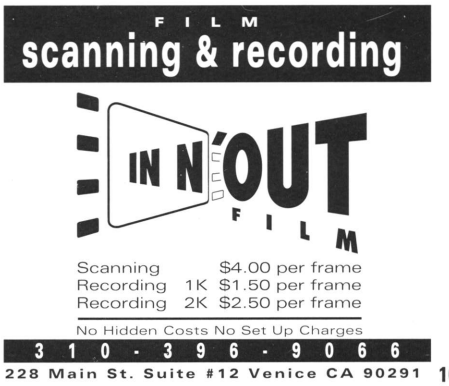
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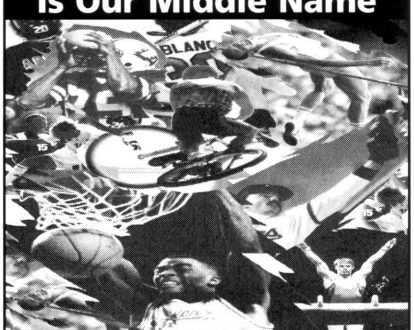

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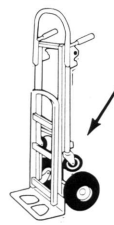

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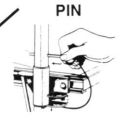

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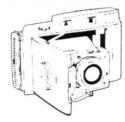

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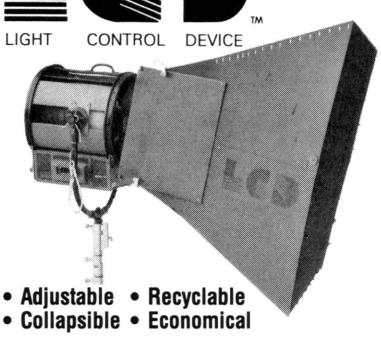

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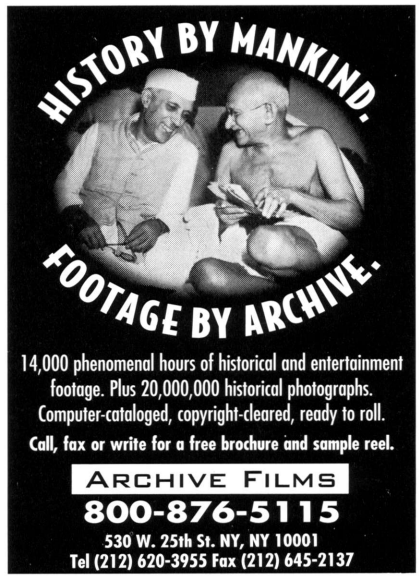

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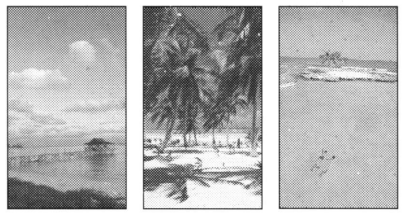

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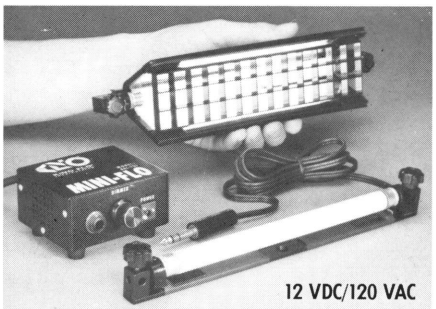

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From the Clubhouse

The ASC's newest members are director of photography Janusz Kaminski, Eastman Kodak's Frederick Franzwa and Oppenheimer Camera's Marty Oppenheimer.

Active member Janusz Kaminski, who won last year's Academy Award for Best Cinematography for his work on *Schindler's List*, was born in Poland and came to this country in 1981. He studied filmmaking at Columbia College in Chicago, and later continued his education at the AFI as well as serving an apprenticeship with John Alonzo, ASC on *Nothing in Common*.

Kaminski got his first feature job as director of photography, on *Grim Prairie Tales*, by calling the production's listing in the *Hollywood Reporter*. Since then he has shot *Cool as Ice*, *Wild Flower*, *Class of '61*, and *The Adventures of Huck Finn*. His work on *Wild Flower* captured the attention of Steven Spielberg, who asked him to do the TV movie *Class of '61*, and, after that, *Schindler's List*.

In December he completed Disney's *Tall Tale* and is currently working on *Little Giants* for Warner Bros.

Associate member Frederick Franzwa is regional business general manager and vice president at Eastman Kodak. In his 22 years at the company he has worked on the development and improvement of several films and processes, including Eastman color negative film 5247, color intermediate film 5243 and the hot process ECN-2. In 1992 he became operations manager for the Motion Picture and Television Imaging Division, where he was responsible for product development, manufacturing, customer technical support and product planning. His current position, overseeing the region of the United States and Canada, often finds him trouble-shooting on movie sets.

Associate member Marty Oppenheimer, of Oppenheimer Camera, began his career as a lighting technician on off-Broadway theater in the early Seventies. After studying theater, photography and film in college he worked as a grip, video camera operator, production manager, and assistant cameraman in Washington State. In 1983 he shot *Bombs Away*, his first feature as director of photography, and also began working as second-unit director of photography or operator on many television shows and features shot in Washington and Oregon, including *Starman*, *The Hunt for Red October*, *The Hand that Rocks the Cradle*, *Sleepless in Seattle*, and *Northern Exposure*. In 1983 he bought and began renting out his own Arri 2C package, and from there created a rental business in Seattle that has grown into one of the largest camera rental houses north of Los Angeles and which has recently been expanded to a new store in Portland.

❧ ❧ ❧

Other ASC members are at work on the following projects:

Michael Ballhaus: *Outbreak*, Warner Bros., shooting in Los Angeles, Northern California, and Hawaii.

Dean Cundey: *Apollo 13*, Imagine/Universal, Los Angeles.

Allen Daviau: *Congo*, Paramount, Uganda, Los Angeles, and Costa Rica.

William Fraker: *Streetfighter*, Columbia TriStar, Australia, Thailand.

Stephen Goldblatt: *Batman Forever*, Warner Bros., Los Angeles.

Adam Greenberg: *First Knight*, Columbia, England and Wales.

Jan Kiesser: *Georgia*, Independent, Seattle.

Matthew Leonetti: *Strange Days*, 20th Century Fox.

Donald M. Morgan: *Katie*, Seattle, Hawaii.

Mikael Salomon (directing): *Zorro*, TriStar. ❧

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I certify that the statements made by me above are correct and complete.

— David Heuring, Editor

For Movie Lovers Only

by Steven Poster, ASC

The annual Telluride Film Festival is unlike most film festivals in that there is no contest for the best films. It's a place where people who love to see movies do just that.

The festival was started 21 years ago by Bill and Stella Pence and Tom Luddy. Under their tutelage, it continues to grow and improve while retaining the sensibility that made it great in the first place. I encountered Bill Pence for the first time as he introduced several of the movies. I learned that he is an educator as well as head of the National Film Preserve, an organization dedicated to the preservation and public showing of motion pictures. But the credentials that really caught my attention he earned in the late Sixties, as a principal at Janus Films, the distributor responsible for bringing to America many of the foreign films that influenced my film aesthetic. Upon this discovery I realized I was in for an exciting weekend.

Seventeen movies and ten shorts were squeezed into my schedule from Friday night to Monday afternoon. Standouts included the new Woody Allen film, *Bullets Over Broadway*, a lovely comedy about the heyday of theater and gangsters in the late 1920s, and *Lonesome*, a wonderful silent film recently restored by the George Eastman House. *Lonesome* featured a scored music track written and performed by a group called the Alloy Orchestra, three talented musicians who have performed at a number of the past festivals.

During this year's festival, I took notice of two important points, the first having to do with film preservation. Every year, the festival makes a point of showcasing many older movies and a certain number of film artists. This year several retrospectives were introduced by film critic John Simon. One resurrected movie, according to Mr. Simon, is one of the most important American motion pictures ever made: Sidney Pollack's *They Shoot Horses, Don't They?*. The film is just as great as I remembered it from 30 years ago. The cinematography of Philip Lathrop, ASC was magnificent, and Mr. Pollack's staging and direction of the great cast was masterful.

The print we viewed had been newly struck from the negative, but I couldn't help being distracted by fading and age flaws. Before the screening, Sydney Pollack had told us that until this particular print was struck, no prints of *They Shoot Horses*, an important American work of art, existed. Indeed, the print we saw was the result of a long struggle by Mr. Pollack to get permission to have a print made — a print of his own movie, to be made at his own expense.

This is not an unusual incident, but there is one unusual aspect — that Sidney Pollack was actually able to get the print made. This incident served to reinforce my belief that we are making a terrible mistake by not putting great efforts into saving our cultural heritage. We have all heard about the great problem of the impermanence of motion pictures and magnetic media. We have been told what a terrible tragedy this is. We even are aware that a significant amount of important material has already been lost forever. Yet we react like spoiled children and will virtually ignore the problem until it's too late. Then we'll be sorry, won't we?

An all-out effort must be made to preserve as much of this material as possible at this late date. I hate to think of the many wonderful movies I saw as a teenager that don't exist today. *They Shoot Horses, Don't They?*, and others like it, can still be saved. The 25 films chosen for clemency by the Library of Congress each year constitute a start, but we must communicate to our government the severity of the problem. We must support every organization dedicated to saving and displaying the early works or our art. The Telluride Film Festival is the work of just such an organization: the National Film Preserve, Ltd. I think the name says it all.

The second thing that struck me during the festival was the artistic and cultural importance of the independent film. That many of these pictures get made at all is a small miracle. But the true miracle is when one of these pictures touches our hearts and becomes a popular success. It is exciting to see the work of emerging new talent with the ability to get a low-budget production together and still connect with the audience. It's also heartening to see some of the great mature talent that's willing to take a chance on these projects if they really believe in the director or the script.

The troublesome part about the good work I saw at Telluride was the small number of American independent directors and projects. This is true, I believe, not because we have fewer talented young directors. In almost every other country with a motion picture industry there are many ways for these pictures to get public support and assistance — economic incentives and coproductions and various other methods to help the independent filmmaker.

I know that ours is a different kind of economy and that these pictures do get made anyway, but it wouldn't take very much to create tax incentives that would attract investment in and support the public exhibition of this type of film.

Independent filmmaking is often the only way to get certain types of scripts made. Mainstream production can't usually support some of the unusual and sensitive subjects that can be seen in independent films. We as the artists and suppliers of equipment and services often do support these productions. In fact, I find the independent projects I've photographed to be some of my most interesting work. I'd like to see more access to accomplished professionals for some of these less-experienced filmmakers.

Venues like the Telluride Film Festival are incomparable for viewing great independent filmmaking; I was certainly able to gorge on movies for a long weekend. But we need to be able to see them in every city on a regular basis. And yes, we must support them as the audience.

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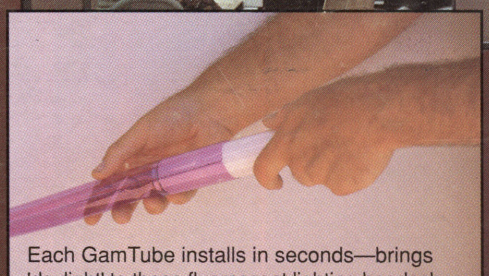

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